DIMENSIONS OF COOPERATIVE LEARNING IN EDUCATIONAL CONTEXTS

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Abstract: *The article discusses the possibilities to increase the role of co-operative learning in educational contexts. The theoretical model introduced in the first section is reflecting the social interdependences perspective, and proposes an integration of humanistic and constructivist models. The new reference framework developed is considered a useful starting point for the by introducing some explanatory models regarding knowledge development through interactions within the learning group, through cooperation. Moreover their effects on learning motivation are underlined in the context of specific educational activities.*
Keywords: *intra and interpersonal competences, learning group, cooperative learning*

1. Characteristics of postmodern education

Present-day school is mainly the product of industrial, modern, impersonal society. When relating education to postmodern society several questions arise: Should education reproduce and preserve culture or enrich it, develop the human being's diversity and potential? The answers to these questions can be identified in the analysis of postmodernism` characteristics as found in education:

▪ Revaluing the subjective dimension of the educational process as a relation where teachers and students are " constructors of meanings and significances",

▪ Complexity and ambivalence by turning from a "paradigm of certitude" to a "paradigm of incertitude", to a subjectivation of learning,

▪ Openness, diversity and transdisciplinarity,

▪ Hermeneutic approach as means and reflexive and self-reflexive capacity of the human being, as possibility of constructing one's own vision of the world and decision taking in accordance with phenomenological perspectives,

▪ Intra and interpersonal communication as means of global intercultural development,

▪ Facilitating creativity by understanding latent socio-cognitive mechanisms and manifests of developing personalities as axiologization of critical cultural elements,

▪ Continuous development and lifelong learning,

▪ Forming competences on the four dimensions of learning: learning to know, learning to do, learning to live among the others and learning to be.

Education can be analysed in a broad manner in an evolutive and comparative way, from the perspective of learning: traditional, modern, postmodern.

Figure 1. Evolutive characteristics of education

Traditional	Modern	Postmodern
Thorough learning	Efficient learning, Active learning.	Significant learning, Thorough learning, Transformational learning, Interactive learning
Passivity	Action and competiveness	Cooperation and subjective engagement
Acquisitions	Abilities, capacities	Competences

2. Humanistic paradigm

Some characteristic aspects of postmodern education originate in psychological humanistic theories of learning. These theories have important contributions for the development of intrapersonal competences. In the middle of the 20th century, C. Rogers promotes a new goal of education, which is still up-to-date: learning how to learn, to involve ourselves in the process of change, our society is undergoing. Learning is considered significant if it involves all five elements:

- It has the quality of personal involvement (rationally-cognitively, motivationally, emotionally, attitude-based),

- It is self – initiated (involves the sense of discovery, intention, expansion and understanding),

- It has resistance power (significant for behaviour, attitudes, learner's personality),

- It is assessed by the learner,

- The core of learning is understanding, spread over the experience as a whole.

„Humanistic paradigm is in favour of an open educational system and for a school that favourizes active participation of the educator in creating the message, meaning, value." (Emil Păun, Dan Potolea, 2002, p.32). This is a non-directive type pedagogy oriented toward facilitating mediated learning based on the following principles:

Human beings have the capacity to learn, having within themselves the curiosity and wish o understand the world, being capable of overcoming the problems arisen by adaptation and especially by learning.

Institutionalized learning is coherent and consistent only when perceived in relating to personal projects. The educator has to help the pupil, to identify and solve problems that arise as significant to him.

Learning perceived as a major need for change in the organization of the self, is seen by pupils as threatening and therefore they tend to fight against it. This perception is the result of the need to change his/her own values.

Knowledge with a threatening character for the pupil is better acquired when threats are reduced to the minimum. Therefore the educational environment has to be comprehensive, familiar and encouraging.

A valid learning is carried out through action, confrontation with problem solving process, through confrontation with social, psychological and philosophical problems as well as personal difficulties.

Learning is facilitated only if the subject is involved and shares responsibility in the learning method, in choosing orientation, self-discovery, decision in how to carry out learning and if s/he is responsible for his/her decisions.

Learning that fully engages the subject has the strongest effects upon his/her personality and it leads to learning by and about him/herself.

Independence, creativity, trust are efficient and act only when self-criticism and self-assessment function as elementary psychical processes involved in learning. Assessment carried out by someone else, even teacher, can have a secondary position because someone who depends only on external evaluation becomes reluctant, unconfident, or remains naïve and immature.

We consider that humanistic education is one of the main ways to cultivate the subject's capacities of communication, of relating to reality in a subjective manner by understanding of the self, of the world and their judgement.

3. Cooperative learning – dimensions and exigency

Social Interdependence paradigm has as representatives K. Kofka, K. Lewin, M. Deutsch, Jhonson&Jhonson, Cohen Sh. Sharan, E, Aronson and others and develops the idea that the type of structural interdependence from a situation determines the way individuals interact among themselves. Social interdependence exists when individuals share mutual goals and the results of each individual are dependent on the others` actions. M. Deutsch identifies three types of interdependence and the ways of interaction that generate them:

- Positive interdependence reflects cooperation actions when individual actions promote the success of the others,

- Negative interdependence which indicates the reverse situation when one's actions block the success of the others,

- No made interdependence by whose means one's activity does not produce effects on the others neither regarding stress nor regarding failure.

The theory of social interdependence generated methodological experiences that tried to promote positive interdependence within the learning group

All these theories generated in the educational practice of the 20th century a ample research and scientific development of cooperative learning. These led to its application is an important way of structuring the formal and nonformal learning situations on different age levels.

Cooperative learning takes place when pupils work together, either in pairs or in small groups to solve one and the same task, to explore a new subject or to create new ideas, new combinations and even authentic innovations.

„Cooperative learning means using as training method of small groups of pupils/students, so as they will be able to work together and eventually each member of the group improves his own performance and contributes to increasing the performances of the other group members." (Jhonson, R., Jhonson D., Holubec E., 1994, p. 3)

Several steps have been made from learning in groups to cooperative learning and organising the learning experience other than individually.

There are some differences between learning through collaboration and cooperative learning, the most important being that in learning through collaboration the stress is laid on the learning process and in cooperative learning the process and the result are equally important. The orientation towards the product as result of the learning process brings about the development of goal oriented thinking and of the feeling of individual and collective responsibility. „Cooperative learning refers to a set of training strategies that involve cooperative pupil - pupil interaction towards the subject, as integrated part of learning process."(Kagan, Spencer, 1994, p. 41)

Cooperative learning develops the respect for diversity, the capacity of empathy, social abilities. The social – cognitive conflict arises given the fact that among the group members there are also cognitive differences. This conflict generates the acceleration of learning.

Numerous studies prove the superiority of cooperative didactic strategies in the prejudice of competitive and individual learning. Cooperative didactic strategies develop superior cognitive processes, communication abilities, improve motivation, self esteem, develop the personality.

In the field related literature, cooperative learning is characterised by the following elements: *positive interdependence, direct interaction, individual responsibility, interpersonal and small group abilities, group processing, pupils` roles and abilities necessary for group work*

Positive interdependence

We may say that positive interdependence is done when the members of a team aspire to a certain mutual acknowledgement, being positively dependent on each other. Everything that is a gain for one member of the team is a gain for the whole team. Pupils realise that they need each other to fulfil the group task. The teachers can structure the positive interdependence establishing *aims, mutual objectives* ("learn and see that all members of the group learn"), *mutual rewards* (team acknowledgement on the basis of members` contribution), *mutual resources, cooperative tasks* (identifying those tasks that would motivate and direct the group), *distributed roles* (the one that resumes, the one that encourages the others, the one that formulates the answer).

Learning tasks

În the field related literature we can read about learning tasks that focus on the learning activity determining different types of group interaction:

- *Task of disjunctive type* The group has to make a selection of each member's answers and contributions. The best solution is identified.
- *Task of conjunctive type.* Implies that the productivity of the group is linked to each member's efficiency, even to the weakest one.

- *Task of additional type.* The result of group's activity is the sum of each member's contribution.

- *Tasks of discretional type.* The members of the group can mix individual options in any way they want. The final solution is the result of all participants` contribution.

Direct Interaction

Pupils help each other in the learning process, encouraging themselves and sharing their ideas.

They explain the others what they know, discuss, teach one another. The teacher arranges the groups so as the pupils to sit one next to the other and discuss each aspect of the task they have to solve.

Individual responsibility

Each student's performance is frequently assessed and the result is presented to him and the group. The teacher can highlight individual responsibility choosing pupils at random for a test, or choosing one member of the group the give the answer.

Interpersonal and small group skills

Groups can not exist or function efficiently if students don't enhance certain absolutely necessary social skills. Students must develop these skills the way they are taught different things. They include conducting, decision making, confidence building, communication, conflict management. Pupils are taught, helped, monitored in using collaborative social capacities that increase the efficiency of group work.

Group processing

Groups need certain moments to discuss how well they have achieved their goals and to maintain efficient work relations among group members. Teachers provide necessary conditions for processing through tasks like: (a) enumerate at least 3 actions of group members that led to group success or (b) enumerate at least one action that could increase the group's success the next day. The teacher permanently monitors the learning and gives feedback them and the whole class about the way they work

Students` role

Within each group the roles pupils play can be oriented towards the task, the group maintenance or both. Because students have to get accustomed to both categories, the teacher sometimes distributes specific roles like the ones below. Pupils` attention is drawn on isolated roles to make them aware of each role's necessity. They have to change roles for each activity because the purpose of the activity is to make them able to perform them all simultaneously. At group's level the following roles can be assigned: *the Assessor*: verifies whether everyone understands what is being worked at, *the Spy* searches for necessary information at other groups or, occasionally, at the teacher, *the Time keeper* pays attention that the group focuses on the task and respect the given amount of time, *the Active listener* repeats and reformulates what other have said, *the Interrogator* extracts information from group members and the *Résumé* draws the conclusions so that they make sense, *the Encourager* congratulates, helps, encourages each member of the group; *the Responsible for Materials* distributes and collects the necessary material, *the Reader* reads the written materials, the Speaker presents the group's conclusions in from of the class

Conclusions

Creating a learning situation involves a value orientation and the option for the ways of structuring pupils` interdependence. The chosen type of structure determines the way pupils will interact with the others and the results they will obtain.

The application of these models implies accepting the change of the actors` role, generating positive effects on cognitive, affective-motivational, metacognitive and social level. This contributes significantly to one's full development and to the development of intra and interpersonal competences. (acc to. M. Roco,2004, p. 141):

• The conscience of self and own emotions (self-conscience as introspection, recognition of feelings according to the way and moment they appear).

• Emotion control (self-control as possibility of realizing what determines the feelings according to the moment and cause of their occurrence and as possibility to diminish negative feelings: anger, fear, anxiety, etc),

• Interior motivation (motivation as exercise of emotion and feeling guidance towards reaching certain goals when there is no reward at stake),

• Empathy (the capacity o understand the others from a affective and sentimental point of view),

• Establishing and guiding interhuman relations (social abilities that occur as manipulative competences that can control other people's emotions).

• Development of metacognitive feelings (through feelings of familiarization, of task difficulty, of trust and satisfaction)

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