COOPERATIVE MODEL OF EDUCATION CHALLENGED BY CONTEMPORARY SOCIAL CHANGES

Introduction

The sign of our times are such worrying phenomena as losing social ties, superficiality of interpersonal relations, low level of trust, social exclusiveness of various types of “Otherness”, or low civic engagement (Marody, Giza-Poleszczuk 2004, pp. 137-143). Janusz Czapiński, an expert on social problems, basing his opinion on the diagnosis of the Polish society, thinks, that “(...) we should as quickly as possible search for methods (...), of how to improve social trust, readiness to cooperate and ability to compromise” (Czapiński 2007, p. 74). The question is what pedagogy and education can offer in terms of negative social changes. The purpose of the present paper is to present the assumptions of a model of education, which prepares young people for subject functioning as well as for being in the network of relations with other people, for exploring mutual initiatives and for civic engagement. There are scientific reasons to believe that implementation of such a mission is supported by education which takes advantage of cooperation. People’s engagement in solving problems together must be preceded by preparing them in the process of education for finding their ground in situations that require dialogue, negotiation, building trust as well as undertaking mutual initiatives. The analyses show that young people both in the early as well as late adolescence appreciate cooperation, yet do not exclude competition, which is triggered by social and economic changes. Apart from that, pupils and students in their educational situations gather a lot of negative experience resulting from badly organized team work (Bąbka 2012, pp. 128-129; Bąbka, Binnebesel 2013, pp. 227-238). With this view in mind, it was assumed that it was justified to find out how cooperation could be approached basing on features of performance as well as benefits obtained through it.

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The author of the present paper is aware of the fact that attributing education with too much authorship in the process of making social changes by preparing young people for cooperation can be accused of meta-pedagogy. On the other hand, indifference towards exclusiveness, intolerance, losing trust and social ties or avoiding such problems in scientific debates can be understood as pedagogic reductionism (Kwieciński 2000, pp. 234-235).

**Criteria of analysing cooperation as a joint action**

Acting together, cooperation, teamwork are notions which from the linguistic point of view are used alternatively. In this paper, teamwork is approached as a synonym of cooperation and an advanced form of acting together, which means engagement of at least two people in accomplishment of their mutual goal. Cooperation makes it possible for all people involved in joint action to obtain comparable benefits. However, not every action of several people working together on the same task can be referred to as cooperation. Therefore, it is crucial to define a criterion with which we can then assess cooperative work. The road from acting together to cooperation is not simple. Not every teamwork (group-work) can be defined as cooperation (Bąbka 2012, pp. 62-69).

It was accepted, that cooperation could be analysed basing on two criteria, within which two indicators can be distinguished more precisely. The criterion related to performance features allows to approach cooperation basing on: (1) action purpose, which is related to the situation of interdependence, (2) character of interaction, which is characteristic for its multidirectional communication, participants’ sharing mutual meanings, (3) organization and management of the action performed by people involved in accomplishment of a mutual goal. Interdependence is a specific pattern of dependence among people in a particular situation, which is a condition for attitudes shown and the dynamics of group processes (Brown 2006, pp. 44-49; Oyster 2002, p. 299). Carol K. Oyster thinks that interdependence is a situation of corresponding results, in which a result achieved by a single person depends not only on this person’s activity, but on the behaviour of the interaction partners (ibid. p. 371). People in a social interdependence situation are involved in relations with other people through the task which connects them, for example, to survive in a catastrophe, to win a volleyball match as a team, to make a performance together, etc. Cooperation can also be concluded on basing on the character of interaction or communication, which supports creation of group norms, procedures of using and maintaining them (Adams, Galanes 2009, p. 86). In every group there is a certain communication network which can be centralized or decen-
Decentralized networks allow a multi-directional communication and favour cooperation, including solving creative problems. Centralized networks restrict the range of cooperation, yet do not exclude performance efficiency (Brown 2006, pp. 11-114; Oyster 2002, pp. 127-128). Non-verbal messages play various functions, for example, they replace words, stress their meaning, modify messages/announcements, monitor the course of verbal communication and indicate the individual’s frame of mind (Adams, Galanes 2009, pp. 102-107; Agyle 1998, p. 84). By watching these indicators we can tell a lot about people’s cooperation. The foundation of cooperation must be made of a good organization of the activity, including: assigning tasks, offering help, excluding competition, coordinating efforts, eliminating such negative phenomena as “free riding” (Weidner 2009, p. 37). The other criterion is related to effects of joint actions making it possible to determine the following indicators of cooperative behaviour: (1) the group’s efficiency and productivity which is expressed by the work accomplished, (2) emotional engagement, (3) sense of community, (4) learning from one another, (5) joy of action and the result obtained. It was accepted that cooperation aims at obtaining a result being satisfactory to the activity participants, as a desired final status. If cooperation is well organized, it brings the results in a form of the so called synergy. We are concerned about social synergy. It is a kind of an activity and development energy released by a team of workers implementing a certain task together (Hubert 2000, p. 17). Not every task of a joint performance results in synergy release. It appears when there is an additional feedback among the activity participants which strengthens energetic – informative processes, which take place in every individual participant of a joint action (ibid. 2000, p. 17; Oyster 2000, p. 193). Synergy is related to the effect of strengthening, intensifying and raising a certain state onto a higher level, for example physical or creative strength which is then expressed by a good result of a joint activity (Hubert 2000, p. 202). Synergy is accompanied by such social effects as offering help, exchange of ideas, taking into account the point of view of other group members, emotional engagement, sense of community, learning from one another, joy of acting together, etc. Experiencing synergy by those taking part in cooperation leaves traits in their minds, which strengthen tendency to repeat cooperative habits in task situations.

Benefits from learning in cooperation

Using the idea of cooperation in the process of education is not a completely new thing. In the Polish pedagogy this aspect, however, has been neglected. One of the reason of this may be relating cooperation to a col-
lective organization of a social life. There is evidence of the efficiency of learning cooperation in relation to various areas of functioning of children and adolescents. Richard Arends (1995, p. 328), basing on the analysis of vast research work confirmed the following hypotheses: (1) there is a link of mutual dependence among activity participants, which improves motivation to perform task together, (2) team work favours shaping strong interpersonal relations, (3) cooperation forces efficiency in communicating, which enhances creation of ideas and has influence on one another. The research work of David W Johnson and Roger T. Johnson proves, that cooperation developed by pupils is more conductive to their learning the school curriculum and fosters better interpersonal relations than competition (Johnson, Johnson 1989, pp. 39, 55, 80). Learning through cooperation causes better school results in pupils no matter what social-economic status they come from (Sharan, Schachar 1999, pp. 318-336). Robert E. Slavin (1983, pp. 121-129) provided evidence on the fact that heterogeneous groups do not set up obstacles for performing tasks that require coordinated action and that it is possible for the members of such a group to obtain results measured with a degree of the school material mastering as well as with the number of social interactions developed by the activity participants. Owing to cooperative learning and peer modelling, pupils stimulate their cognitive and social development. However, it is necessary to select group members properly (Smith et al. 2008, pp. 54-55). Sholomo Sharan and Hanna Schachar (1999, pp. 318-336) proved the hypothesis, that the better the cooperation atmosphere is, the better attitude is shown by pupils towards the tasks and co-workers. Children and adolescents taught in cooperation have a higher and more stable self-esteem than their peers who are provoked to rivalry and individualism, a greater aptitude to act and a better mental health, better ability to cope with adversities (Borsch 2010, pp. 90-100; Joyce et al. 1999, p. 102; Gillies 2007, p. 79; Johnson, Johnson 1989, pp. 16, 86, 130-131; Deutsch 2005, pp. 27, 72-75). Eliot Aronson (2001, p. 33) proved, that learning in cooperation on the basis of pupils’ mutual dependence, has brought positive desired results as far as the quality of social relations in racially and culturally differentiated groups is concerned. Owing to cooperation pupils liked one another, improved their school results, started to attend school more eagerly and their self-esteem got improved. Cooperation is a certain stage on the road to overcoming prejudices and discriminative attitudes. Advantages of learning in cooperation for disabled pupils, those with learning difficulties, as well as for those who are ethnically different, both in cognitive as well as in the social aspect, are also confirmed by the analysis made by Robyn M. Gillies (2007, pp. 118-120). By learning in cooperation
pupils become more caring, more eager to help and understand the others better (Kagan, Madsen 1971, pp. 32-39). Acquiring positive experience by an individual related to developing cooperation fosters repetition of cooperative behaviour (Weidner 2009, p. 54). In the course of cooperation, apart from gathering positive experience, people develop their trust towards others and their readiness to undertake mutual challenges grows. Research results provided by several authors speak for the fact that cooperation makes it possible for children and adolescents to obtain positive results in mastering the school programme material, furthermore, it improves their self-esteem and social relations, strengthens the group unity and fights social prejudices.

**In pursuit of assumptions of cooperative learning**

The idea of cooperative learning refers to the concept of social educational models suggested by Bruce Joyce, Emily Calhoun, David Hopkins (1999, pp. 37-46). Social models aim at developing pupils’ widely approached competences related to cooperating with other people and functioning in a community. The value preferred in a social group of models is civic cooperation, whereas the mission of education is directed at offering help to a human being in his search for the place in a community (Brzezińska at al. 1996, pp. 202-205). Bruce Joyce, Emily Calhoun, David Hopkins (1999, pp. 37-46) distinguished seven versions within the family of social models, including: group, social and legal testing, a laboratory model, a model of playing roles, a model of positive interdependence and a model of structured social research. The social models of teaching use the phenomenon of synergy, the so-called collective energy. It allows to generate possibly the best solutions in various task situations as well as to integrate participants of a joint action. Owing to this, a community of learning people is established. The approach to the educational model presented in the paper is close to understanding the problem of educational intervention as an activity meaning to interfere with the course of events in order to make a change in a certain state of affairs (Wiliński 1996, pp. 211-216; Szkudlarek 2003, p. 365). Irrespective of sociological, psychological or pedagogical perspective of approaching intervention, it is important, that people who design such activities were aware of the effects they want to achieve as well as of the methods of implementation.

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1 The authors distinguished four families of models, to which certain educational solutions correspond to: (1) the model of processing information, which stresses improvement of pupils’ processing of information about themselves and the world, (2) personality models, in which the basic educational category is a pupil’s “I”, (3) behaviour models that aim at modifying people’s behaviour and (4) social models to which the paper refers.
The author of the paper accepted the approach presented by Anna I. Brzezińska (2000, pp. 233-234) towards a double character of every educational activity, including educational intervention. It means that, educational intervention interferes with the individual reality of a pupil, with his values, knowledge, attitudes, the concept of his/her own person and other people. Furthermore, educational intervention infringes the social reality, including the cultural world of events. The double character of educational intervention means, that on one hand it contributes to changing a person, but also to changing his/her operating methods. On the other hand, changes from the social point of view, require from a person changing his/her current operating methods as well as his/her private world of events. The present paper is limited only to signalling the selected aspects of the model of cooperative education. According to Piotr Wiliński (1996, pp. 211-216) the assumptions of educational intervention should take into account the following: (1) the link between the intervention and social needs, (2) values that lay the foundation of the model, (3) the link between the model and development of personal and social competences, which make it possible for pupils to transfer from individual activities to group and collective ones (4) methods of interfering with the pupils’ individual and social reality.

1. The link between the intervention related to cooperation and social needs

There are numerous arguments that justify the need to teach cooperation to children and adolescents. On one hand, these arguments are related to weakening person-to-person ties, the low trust people have to one another, instrumental treatment of social relations by anticipating benefits they may bring, increasing importance of competitiveness and rivalry, as well as little civic engagement (Czapiński 2007, p. 74; Marody, Giza-Poleszczuk 2004, pp. 137-146). On the other hand, globalisation causes that people experience how much they depend on one another. The suggested model of cooperative education may contribute to fighting negative changes in social relations, as well as favour building a social capital in a community, which, apart from its economic value, allows to reach a sense of security, joy of life, exchange of goods and services through the network of relations (Putnam 1995, p. 263; Bartkowski 2007, p. 56). The many features of education for future include, among other things, reflectiveness, openness to negotiations and cognitive choices, axiological heterodoxy, participation as a tendency to control due to the learning subjects, criticism related to readiness to reinterpret meanings and to understand them from different points of view (Malewski 2010, pp. 73-73). On the other hand, Józef Kozielecki stresses the importan-
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2. The value of the cooperative education modelling

The value that is preferred in social groups of models is civic cooperation, and the mission of education is directed at helping people in their pursue for a place in the community (Brzezińska 1996, p. 202-205). The educational model that aims at learning in cooperation is educating for democracy and in accordance with the assumptions of democracy. Education in this sense means providing conditions allowing pupils to cooperate in task groups and to gather social experience related to interpersonal relations, conflicts and negotiating, etc. Educational activities facilitate promotion of the values that lay foundations of democratic social order, such as: tolerance, solidarity, civic cooperation, reflexiveness, criticism, respect for other people and their views.

3. The link between the model of cooperative education and pupils’ personal and social competences

Richard Rorty (1993, pp. 86-102) reasonably noted, that education is expected to exercise the two functions: emancipating and socializing. The emancipating function is related to developing pupils’ individuality, aspirations as well as skills necessary to perceive and solve intensified social problems, fight discrimination and social exclusiveness. The socializing function is related to preparing people to function in communities, developing social competences and adaptation skills. Educational solutions that refer to social models foster learning, getting familiar with one’s own advantages and disadvantages, making decision in a group and solving problems, thus shaping cognitive (personal) and social competences. Cooperative education contributes to development of such pupils’ cognitive (personal) competences as: reflexiveness, self-esteem, planning activities, making decisions, acquiring knowledge and applying it to actions taken. Cooperative learning also develops such social competences as empathy, negotiating, thinking in the “WE” category, openness towards others, etc. The educational model links the emancipating function of education with the socializing one (ibid. pp. 96-97). On one
4. Task as a source of triggering cooperation

Robyn M. Gillies (2007, p. 6) thinks, that a productive cooperation can be triggered by proper tasks, in which pupils must establish interactions with one another and agree on a direction of the action to be taken. In terms of the assumptions of a model of cooperative education it is worth referring to the task typology elaborated by Ivan D. Steiner (1972). The researcher distinguished the following task types: additive, disjunctive, conjunctive, compensatory and divisible (compare: Mika 1981, pp. 361-362; Steiner 1972, pp. 14-39).

<table>
<thead>
<tr>
<th>Task type</th>
<th>Definition</th>
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<tr>
<td>Additive</td>
<td>It means that members of a particular group when performing the same tasks obtain results better than those when acting individually. It is important that individual performances of all the participants are summed up.</td>
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<tr>
<td>Conjunctive</td>
<td>Requires involvement of all group members, both the most and the least competent.</td>
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<tr>
<td>Disjunctive</td>
<td>In this task type a group member identifies a correct solution of the problem in the quickest time.</td>
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<tr>
<td>Compensatory</td>
<td>It means a discussion in which group members exchange individual solutions in order to reach a mutual agreement.</td>
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<tr>
<td>Divisible</td>
<td>It means to divide a task into smaller elements, the so called sub-tasks to be assigned to group members.</td>
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*C. K. Oyster (2002, p. 179) rightly noted, that when assessing task productivity its is important to establish the basic criterion: (1) whether the final effect is important, (2) or, for example, the work that has been done and the course of interaction? According to I.D. Steiner there are three universal groups of factors, which affect group productivity: type of the task, team resources and the processes that take place in the group (Steiner 1972, pp. 41-67; Brown 2006, p. 160). Some can increase productivity and the other restrict it. When pupils are performing the determined tasks, the cooperation they establish takes different forms due to the methods in which
the pupils are working, task sharing and the work done or communicating by the group members. As I. D. Steiner notes (1972, p. 15) that the nature of every task is different.

For the needs of the analyzed model of education we are concerned about a processual approach to cooperation, which means that task completion, the work done and the process of work performed by pupils can be more important than the result itself. The effect of experiencing interdependence, which leads to cooperation, is communicating with one another, offering help and sympathy to one another, group cohesion, learning about one another, as well as improved self-esteem and acceptance of otherness (Brown 2006, p. 47; Deutsch 2005, pp. 21-40). The work done in the course of cooperation speaks for the group efficiency, however, it cannot be the only criterion of assessing pupils’ performance. The experimental research work done makes it possible to verify the potential social productivity of tasks\(^2\). The aspect analyzed in the research referred to social framework the tasks impose on their participants during cooperation. The potential task productivity in terms of cooperation is the social framework, the interpersonal space which is created in the course of the activity, which facilitates pupils’ ability to communicate, their agreeing on the action strategy, sharing knowledge etc. The research analysis shows that the best results, as far as cooperation is concerned, were obtained by pupils in the conjunctive task. A little bit worse results were in the additive and compensatory tasks. It is worth stressing, that in all task types the average of results obtained by pupils correspond to the average level. This, unfortunately, speaks for low cooperative skills of young people subject to experiments. Considering the level of cooperation, the least productive was a divisible task. The researchers decided not to verify the productivity of a disjunctive task in terms of cooperation. The activity in this type of a task means that a member of a group, who knows the answer, offers a solution to a certain problem. Differences in cooperation were manifested especially between the divisible and the other task types (Bąbka 2012, pp. 185-195). The research results can be interpreted by referring to the ideas presented by I. S. Steiner (1972, pp. 41-67) who thinks, that the task type determines the scope of cooperation developed by participants of a joint action. Conjunctive tasks are in favour of negotiation and reaching agreements jointly, which provides real chances for occurrence of a wide communication spectrum and decentration and cooperation. Compensatory tasks allow pupils to spot differences among one another as

\(^2\)Potentiality, as the author of the present paper understands it, is “the existing set of circumstances, which assumes a hidden possibility, anticipating, that certain hidden properties or talents will develop” (Reber 2002, p. 259).
well as to find out that each pupil can be active and contribute to the job assigned provided its weaknesses and strengths have been taken into account. Additive tasks give pupils a chance to experience the strengths that are in a group effort. They require from their participants responsibility as well as a good communication, otherwise we may experience the so called “free riding”. Divisible tasks require from pupils a good action organization and assignment, communication related to determining the terms of cooperation and rules of assigning sub-tasks. Tasks of this type require individual work, which significantly restricts the cooperation communication.

The positive experience accumulated by pupils related to performing tasks together increases the possibility of searching for opportunities for cooperation, increases performance efficiency and magnifies effects which are connected with the phenomena of social synergy. Thus, there are reasons for using the task typology as a means of implementing the assumptions of the cooperative education model.

Conclusions

The problem of cooperation is quite rarely approached to in the Polish literature on the subject. It is a pity, because it has been proved, that a well organized cooperation allows people to obtain numerous personal (cognitive) and social benefits. Learning in cooperation fosters, among other things, a better mastering of the school course material, developing trust to other people, creating more satisfactory interpersonal relations, social integration, a better mental health and better self-esteem. Apart from that, gathering positive experience on cooperation by an individual contributes to repeating cooperative habits, without which social capital cannot be built. In the meanwhile, western researchers have been continuously interested in using cooperation in the process of making social changes through cooperation (see: Borsch 2010, Gillies 2007, Weidner 2009). Empirical evidence on benefits from learning in cooperation justifies the importance of getting insight into the problem.

The paper attempts to show, that the model of education that incorporates cooperation can be an answer of pedagogy to many questions resulting from social changes taking place in the present world. The presented assumptions of the cooperative education refer to the social group of educational solutions, in which the value is civic cooperation, whereas the mission is offering help to an individual in his search for a place in a democratic society. This does not mean, however, that the suggested way of approaching education is the only correct and binding one. The present paper does not complete the discussion on the problems of cooperative education, which
still requires numerous conceptual supplements. The presented description of the criterion of an analysis of a cooperative activity is only a suggestion of indicators making it possible to assess cooperative behaviour manifested by participants of an educational process. A complement to the cooperative education model is a description of the task typology verified through tests, which present a confirmed means of triggering cooperative attitudes in pupils.

**Literature**

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Keywords: education, cooperation, types of tasks in favour of cooperation.

The purpose of the present paper is to present the assumption of the model of education, which prepares young people for subject functioning as well as for being in the network of relations with other people, implementing mutual initiatives and for civic engagement. The description of the presented cooperative model includes: (1) the link between the intervention and social needs, (2) values that lay the foundation of the model, (3) the link between the model and development of personal and social competences, which make it possible for pupils to transfer from individual activities to group and collective ones (4) methods of interfering with the pupils’ individual and social reality. The presented description of the criterion of an analysis of a cooperative activity is only a suggestion of indicators making it possible to assess cooperative behaviour manifested by participants of an educational process.