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### **Effect of teaching relationships with able peers on the development of children with disabilities**

Research done over the last twenty five years indicates that contacts with peers positively affect the child's motor, cognitive, social and emotional development. It is through relationships with peers not with adults that the child learns to establish social bonds, collaborate, help, share, put forward initiatives, defend one's own interests, negotiate, reach common goals, perform the function of a leader and submit to leadership of others. It has been proved that a mere presence of peers has a mobilizing effect on the child's cognitive activity. For example, children at kindergarten age solve tasks faster and better in the presence of peers than in solitude<sup>1</sup>. Contacts with peers also stimulate emotional development. It is through such contacts that the child learns to express emotions in a socially acceptable way and to recognize emotional states of others and develops the ability of empathy and emotional self-control<sup>2</sup>.

Until late seventies of the last century, the child was treated as "an empty vessel" that is gradually "filled up" with knowledge and skills under the influence of adults. It was assumed that educational effects are unidirectional in nature: from an adult to a child. It was not taken into consideration that children learn from one another. Foot, Morgan and Shute<sup>3</sup> were the first ones to have refuted the view that children are solely the recipients of teaching actions of adults. They proved that children can also perform the roles of teachers and assistants if they are given an opportunity to operate in proper circumstances and are made responsible for the teaching process.

In my opinion two types of teaching interactions between children can be distinguished: "peer tutoring" and "peer collaboration".

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<sup>1</sup> Cooper C.R., Development of collaborative problem solving among preschool children. "Developmental Psychology" 1980, 16.

<sup>2</sup> Twardowski A., Rola pełnosprawnych rówieśników w procesie wspomagania rozwoju dzieci niepełnosprawnych, [w:] W. Dykcik, A. Twardowski (red.), Wspomaganie rozwoju i rehabilitacja dzieci z genetycznie uwarunkowanymi zespołami zaburzeń. Poznań 2004, Wyd. PTP.

<sup>3</sup> Foot H.C., Morgan M.J., Shute R.H., Children helping children. Chichester 1990, John Wiley & Sons.

“Peer tutoring” takes place only when one child (tutor) helps the other (novice) to acquire certain knowledge and skills by providing them with instructions, hints and advice or directly guiding their actions. The relationship between children is asymmetrical since the tutor’s knowledge surpasses that of the learner and the tutor is usually older. Peer tutoring is also grounded in Vygotsky’s theory<sup>4</sup>.

The term “tutor collaboration” refers to the situation in which children who are solving a specific problem exchange information. The relationship is symmetrical in nature as the partners possess similar level of knowledge and skills and are usually of the same age. Working together, children gain new knowledge, which is not a simple sum of information possessed by each of them. This type of teaching relationship is supported by Piaget’s theory, where he claims that contacts with peers are conducive to overcoming cognitive egocentrism as they make children compare different cognitive perspectives. Piaget’s view has been further developed by Willem Doise and Anne – Nelly Perret – Clermont from the University of Geneva. These authors have proved that in the process of joint problem-solving the child encounters different, although not always correct, points of view represented by their partners. Such situation is conducive to re-structuring former representation as the child has to connect the ideas suggested by their partners with their own idea of how to solve the task<sup>5</sup>.

The first successful attempt of including able peers into the process of aiding the development of disabled children was undertaken by Strain and his coworkers<sup>6</sup>. By means of a modeling procedure they taught four-year-old children with high IQs (above 130 points) and high levels of social development different ways of inviting their peers to play together. Then, they gave the children who have been so trained an opportunity to use their acquired skills while playing with four-year-old moderately mentally retarded peers. As early as a few days later, disabled children started to get involved in games and start conversations. The same procedure was applied with severely retarded and autistic children. Also in these cases, after several playing sessions, disabled children started to establish social relationships and assume pro social behaviours. Later on, able children were taught to encourage disabled peers to communicate: ask questions, ask for answers and suggest the partner what they should say. This procedure proved to be very effective.

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<sup>4</sup> Wygotski L.S., Wybrane prace psychologiczne. Warszawa 1971, PWN.

<sup>5</sup> Perret-Clermont A.N., Social interaction and cognitive development in children. London 1980, Academic Press.

<sup>6</sup> Strain P., Shores R., Timm M., Effect of peer interaction on the behavior of withdrawn preschool children. “Journal of Applied Behavior Analysis” 1977, 10.

In Goldstein and Wicktrom's study<sup>7</sup> two able children at kindergarten age were taught how to facilitate starting and maintaining interaction by mentally disabled peers. These facilitating strategies consisted in :1) establishing eye contact, 2) initiating common play , 3) talking about actions performed by their partner or themselves and 4) responding to their partner's statements by repeating them, continuing or asking for additional information. Following the completion of a training session, able children used the acquired strategies in relationships with three autistic peers during classes in integrative kindergarten. After twenty days, a significant improvement of the ability to establish social interactions was observed in autistic children.

Hunt and coworkers<sup>8</sup> taught 5 children at puberty how to conduct conversations with mentally disabled children by using a book containing illustrations of social situations as well as words and expressions used in such situations. Following the completion of training, able learners entered into relationships with three severely mentally retarded peers. Already after several days, a significant increase in the number of correct utterances was observed in disabled children. In subsequent studies it has been proved that disabled children use acquired skills also in interactions with new able peers, irrespective of whether new partners make use of facilitating strategies or not.

Other studies have shown that even without special training able children can aid the development of social and cognitive competencies of their disabled peers. The teacher only had to properly match the children and provide them with toys. For example, Paul<sup>9</sup> arranged for the children to play in three- person groups consisting of one child with speech development retardation and two able children. As early as after several days, a significant increase in the number of correct utterances was observed in children with speech dysfunctions. Furman (see Fey<sup>10</sup>) matched in pairs children at kindergarten age rejected by children of the same age with children 12 – 20 months younger. Each pair was given toys aiding the establishment of social interactions and played with them for 20 minutes every day. The control group consisted exclusively of pairs of children rejected by their contemporaries, who were given the same toys. After six weeks it was observed that the sociometric position of children playing with their juniors significantly increased whereas the position of children

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<sup>7</sup> Goldstein H., Wicktrom S., Peer intervention effect on communicative interaction among handicapped and nonhandicapped preschoolers. "Journal of Applied Behavior Analysis" 1986, 19.

<sup>8</sup> Hunt P., Alwell M., Goetz L., Acquisition of conversational skills and the reduction of inappropriate social interaction behaviors. "Journal of the Association for person with Severe Handicaps" 1988, 1.

<sup>9</sup> Paul L., programming peer support for functional language, [in:] S.F. Warren, A.K. Rogers-Warren (eds.), Teaching functional language. Baltimore 1985, University Park Press.

<sup>10</sup> Fey M.E., Language intervention with young children. Boston 1986, College-Hill Press.

from the control group did not change. In my opinion, Furman's research undermines a traditional view that a disabled child acquires new skills only through relationships with more competent partners or partners who possess a similar level of competence. Furman proved that relationships with less competent peers also aid the development of a disabled child.

The studies presented above prove that thanks to relationships with properly trained peers disabled children more often get involved in team games, more often establish interactions with their peers, are more eager to talk to them and less often exhibit socially unacceptable behaviours. After these relations come to an end, acquired skills are retained at the same unchanged level and disabled children are capable of using them in new situations, in relationships with new people. Able peers can, therefore, be included in the process of disabled children rehabilitation. However, in order to participate in a therapy programme, able children need to acquire particular skills during a specially organized training. Such training, both group and individual, should consist of the following stages: 1) presentation of a detailed description of a particular skill, 2) demonstration of this skill by a trainer, 3) practice/ exercise in using this skill in the form of role playing, 4) making use of this skill in relationships with disabled peers in role plying, 5) making use of the acquired skill in relationships with disabled peers in natural situations. The last stage is of uttermost significance, since unexpected difficulties may arise while transferring acquired skills from training situations to real life situations.

Inclusion of able peers into the process of aiding the development of disabled children is beneficial for both groups. Able children have the opportunity to get to know disabled peers better, to understand them and to develop an accepting attitude toward them. They have a chance to find out that it is possible to play with and talk to disabled peers, that they can learn much from them and that their inner world is rich and worth knowing. Moreover, teaching somebody helps to structure and improve one's knowledge of a particular area.

Therapeutic relationships with able peers are beneficial to disabled children in many ways. Their involvement in social life of the group increases, the number of contacts with peers increases as well as the number of conversations in which they can successfully participate. Disabled children have the opportunity to learn that their able peers pay attention to them and are willing to play and talk to them. They also have a chance to experience that they can successfully influence other people. What is more, their autonomy increases since they have to rely more on themselves in relationships with peers.

Application of teaching interactions in the process of disabled children education and rehabilitation gives rise to many questions that require verification by further research. They are as follows:

1. What criteria should be used when establishing pairs “tutor – disciple/ learner”? There are many possibilities, for example: a dyad composed of children of different ages and different levels of abilities; a dyad of children of the same age but differing in terms of abilities, a dyad of children of the same age and the same levels of abilities. It is also unclear whether boys should teach girls ( and vice versa ) or whether teaching a partner of the same gender is more efficient .
2. Peer tutoring also gives rise to controversies of ethical nature. Above all, the teacher must make sure that it is beneficial to both “the tutor” and “the learner”. The problem arises whether and what able children should know about their partners’ disabilities and the effect of these disabilities on the learning process. The question remains open as to how to prevent those assuming the roles of teachers from developing a sense of being unique and of possessing special abilities; how to counteract the development in them of a sense of superiority or even power over the peer they teach.
3. How to incorporate peer tutoring into classroom and lesson system of school organization? How to arrange the classroom (lay-out of tables and chairs) and what teaching aids to prepare? How to organize the classes to avoid mutual disturbance by working pairs or teams? What additional training should the teacher get?
4. What attitude towards peer tutoring will parents adopt? Peer tutoring may not be supported by parents of able children, especially if they do not notice that it may be beneficial to their children. Taking into account the fact that modern school is dominated by rivalry and competition rather than collaboration, some parents may regard the time their child spends helping a less able peer as the time wasted in terms of that child’s own education.
5. How to persuade teachers to make use of peer tutoring, how to change a traditional view that real knowledge can only be provided by the teacher and the knowledge gained from peers is worthless in terms of educational goals?

In view of the above, it is important for adults to understand that there are situations in which a disabled child can achieve more “with a little help of their friends” than with the help of specialists.

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