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Michael Schleifer, Marie-France Daniel, Richard Pallascio and Louise Lafortune

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Concepts of Cooperation in the Classroom

Michael Schleifer, Marie-France Daniel, Richard Pallascio, and Louise Lafortune, Université du Québec à Montréal

Until the 1960s, teachers were asked to provide evaluations not only on the learning of traditional subject-matter such as mathematics, reading, and writing but also on questions of character such as obedience and honesty. After the famous 1958 decision of the Supreme Court of the United States (Kohlberg 1964, 1970; Schleifer, 1976) ruled that questions of character and morality fell only within the province of parents, teachers and schools were asked to restrict themselves to academic matters. These events were crucial in stimulating Kohlberg and others to find a form of moral education that was non-indoctrinative, promoted reflection about moral issues, and did not lead to traditional forms of evaluation (Kohlberg, 1970; Schleifer and Lebuis, 1991).

In 1998, forty years after the Supreme Court decision, teachers are asked once again to provide ratings in their report cards not only on academic issues, but on questions of character and morality. To be sure, they no longer assess behaviours such as "honesty" and "obedience," but have substituted more popular behaviour-ratings such as "cooperation" and "expression of feelings." When the five-year old granddaughter of the first author brought her report card home to her parents, they found that she had the required ratings on all items except "cooperation." Here, she was judged as "needing more work" (the modern qualitative equivalent of a B-). The child's mother wondered what kind of cooperation was lacking, since the child is generally friendly, communicative, and plays well with others. From asking question, she learned that the teacher occasionally formed groups and placed students to work together according to their strengths and weaknesses. Simply put, the little girl did not like working in some of these organised groups, and was fearful because she had been placed with one or two of the "tough guys" in the class. This personal incident illustrates a very wide-spread finding—namely, that different perspectives on cooperation in education are often operative, and may, indeed, clash with one another (Daniel and Schleifer, 1996). Children and teachers may use the word "cooperate" but mean very different things. Teachers have in mind working in small groups which they organize. Children have been told by their parents to cooperate, meaning "getting along and not fighting while playing." The teacher's notion of cooperation is not only different but can be experienced as unwanted, particularly when it is an imposed form of group involvement (Thorkildsen and Jordon, 1996, Daniel and Schleifer, 1996, Fearnley-Sander, 1998).

These theoretical considerations have been supported by empirical research. One study (Schleifer and Fitch, 1993) has shown that children have different concepts of cooperation which change with development. In addition to the developmental trends, there are also differences within age-groups, and between girls and boys. All of these conceptions appear, furthermore, in samples of college and university students (Schleifer and Fitch, 1993). There are conceptions related to "good behaviour" followed by more specific notions tied to the criteria of working towards a common goal. Still later, ideas of level and quality of communication become important. Finally, there exists a specifi-

cally moral dimension to cooperation. This view, inspired by the work of Piaget (1932) and Dewey (1940, 1944), sees cooperation as an end in itself. Only thus can one portray cooperation as necessarily good. In contrast, cooperative learning (Slavin, 1983, 1985; Johnson and Johnson 1975, 1986, 1989) sees cooperation as a means towards an end—namely, better academic results. Similarly, the Doise-Mugny (1991) view, which emphasizes common aims, also sees cooperation as a means to an end; cooperation is the independent variable to be manipulated towards certain consequences, particularly cognitive growth. Despite differences in detail, all these views perceive cooperation as an alternative to competition only if proven to give "better results." In response to criticism from some educators—for example, Kohn (1991)—who wish to deemphasize rewards for cooperating, Slavin (1991) is unrepentant. For him, cooperation is irrelevant in contexts where students are achieving average results! The present paper will examine some of these different conceptions in the light of recent work in the classroom using an approach which emphasizes philosophical discussion in regard to mathematics. Different forms of cooperation were studied (large versus small groups, directed versus spontaneous groups, and homogeneous versus heterogeneous groups) to see their effects on concepts of cooperation. The results will also be compared with those from a relevant study at the University of Chicago (Thorkildsen and Jordon, 1996) as well as earlier work on the development of the concept of cooperation (Schleifer and Fitch, 1993). Before turning to the results of the study, we will provide more details on the different conceptions of cooperation.

Concepts of cooperation

If asked whether cooperation is a good thing, one must first ask what "cooperation" means. As an analogy, consider the question, "Is lying bad?" The answer to the question depends upon the concept of lying being used. In moral education, it is imperative to concentrate on what lying means and implies, rather than on trying to affect "right" or "wrong" behaviour directly. All children, and many adults, will conceptualize lying in terms of "not telling the truth," without considering the more sophisticated notion of lying as intending to deceive (with the complicated paradoxes involved, in that repeating the "literal truth" may very well be lying, and where intentions and consequences clash). Only careful analysis of lying at the conceptual level can determine the further question of whether lying is bad. When lying is at this most complex level in terms of intention to deceive, one can argue that lying is intrinsically and necessarily bad. With cooperation, also, it is only at the most complex conceptual level that one can say that cooperation is intrinsically and necessarily good. Both theoretical considerations (Daniel and Schleifer, 1996) and empirical research (Schleifer and Fitch, 1993) have shown four broad developmental levels in conceptualizing cooperation. The first level (Stage 1) sees cooperation as good behaviour (absence of fighting and arguing). Virtually, all very young children (ages 1-5) understand "cooperation" in this way, although so, too, do many adults (Schleifer and Fitch, 1993). One theoretical portrayal of this perspective can be seen in Orlick's (1978) work which sees cooperation as good or "altruistic." However, the reasons for its being good are framed in terms of "good feeling" rather than the kind of moral criteria which only appear at higher levels. This "good feeling" view is summed up in a chapter headed "*I*

like you when we cooperate" (p. 37). Cooperation is a means of "getting the ball rolling" towards people feeling good about one another (p. 38). Orlick has been very influential in inserting cooperative games in schools to replace the traditional competitive ones. However, the description of the advantage of his form of games is always in terms of the "good feeling" or "liking" it brings about. For example:

> This particular play pattern broke up quickly, as the children began linking hands and running in groups of two, three, or four. Human hugs were a common occurrence.

We are also a great proponent of human hugs. However, this hardly serves as the criterion to demonstrate the superiority of cooperation over competitiveness. Witness the exuberant hugs of the professional hockey players after scoring a goal in overtime. Orlick's book is a hodge-podge of views about mainstream Canadian society. It is compared (always unfavorably) with two others, the Inuit in the Canadian north, and the people of P.R. China. We will not comment upon Orlick's views concerning China, except to note that his observation of cooperation rather than competitiveness in sport is, to say the least, exaggerated. It is only fair to note that China's re-entry into world-wide competition is relatively recent (Orlick's book was published in 1978). Orlick's observations concerning the Inuit which lead to the conclusion that theirs is a primarily cooperative society are of the following variety:

> Many times children were observed holding hands, or walking with their arms around each other's shoulders. Children always said "hi" and asked us our names. . . . A research assistant . . . was quick to comment on the marked difference in the extent of cooperative behaviour among these children as compared to southern Canadian children. (p. 46)

The observations seem to be subjective and prejudged. Orlick claims that the Northern Games (which he witnessed in 1976) are primarily non-competitive. He admits, however, that there were declared winners, and an awards ceremony (p. 234). In the face of this contradiction, the lame explanation offered is that "in most events people did not know who had won, and no one seemed to care" (p. 234). With this reasoning, we could conclude that there is never competition (even in the N.H.L. and N.B.A.) if the spectators are bored. With Orlick's peculiar perspective in mind, it is hardly surprising to find that he applauds Aboriginals playing baseball but refusing to "steal second base":

> The importance of fairness in games and life was again revealed here when one teacher failed to persuade the runners to steal bases. (p. 225)

Clearly, Orlick is no expert on rules of the game, nor on what is normally taken as a moral orientation to rules. Talk of "fairness" in this case is evidence of simple confusion. Obviously, there is nothing unfair about everyone (on either team) playing by the rules. No doubt, Orlick would applaud some youngsters refusing to capture a rook in chess or a trick in bridge on the grounds of being against "stealing." The only card game discussed in the book is poker. Not surprisingly, this competitive game is condemned. One of the bizarre reasons for dismissing it is because "one cannot be open, honest, and generous, and play a serious game of poker at the same time" (p. 135). Orlick seems to believe that not being honest and open about what one holds in one's hand is related to one's honesty and openness in general. No attempt is made to show this link,

which seems quite ridiculous. Without the link, furthermore, Orlick's reasoning is simply fallacious. There are other examples of stage-one reasoning about cooperation. In Ewen's book on moral reasoning (1981), it is held that "all moral practices are cooperative practices" (p. 64). Like Orlick, cooperation is given a very broad all-encompassing definition. Ewen's ideas are used in a recent book by social psychologist, Michael Argyle (1992). This influential social psychologist is reacting to the limiting metaphor concerning cooperation which has dominated research in sociology and psychology for decades

The Prisoner's Dilemma Game

This research paradigm was invented in 1950 by Merrill Flood and Melvin Dresher, two game theorists at the RAND Corporation. They devised an extremely simple game: two actors face a single choice between two options (termed cooperation and defection). Defection was a clearly superior choice, regardless of what one's partner did, but if both actors made this choice, they would be worse off than if they had made the "irrational" cooperative choice. A colleague, Alvert Tucker, wrote a story to go along with the game that involved two prisoners, and the game became known as the Prisoner's Dilemma Game. Against this restrictive paradigm, Argyle's goal is to reconceptualise cooperation in broader terms. However, Argyle, like Ewen above, ends up with an all-encompassing, much too broad definition. Almost any example of human behaviour seems to be counted as cooperative (eating together and gossiping, for example). Anything short of bludgeoning someone over the head with a club would seem to count. As mentioned earlier, this undifferentiated conception of cooperation is typical of very young children. Schleifer and Fitch (1993) showed that this tendency continues to exist even among older children as well as some adults. For example, five individual sitting in their own homes eating breakfast were rated as showing "some cooperation." This finding occurs at all ages, including populations of university students. Justifications for the ratings indicated that subjects made this judgment on the basis that no protagonist was harming, harassing, or annoying the others. The Stage 2 level concerning cooperation is characterized by common aims. Unlike Stage 1, where cooperation is synonymous with "being good," or "good feeling" or "absence of arguments and fights," this conception demands that there is working together towards a common aim for an activity to be called minimally cooperative. On a theoretical level, this idea is formulated by May and Doob (1937) and Helen Block-Lewis (1944). Lewis argues that sitting around together, getting along well, and not fighting are not sufficient criteria for cooperation. It is realizing a common objective which is the necessary ingredient. Furthermore, there has to be a putting aside of personal needs and objectives for the common aim. May and Doob (1937) add that the individuals have to have some form of equal sharing of the tasks towards this common aim. On this view, cooperation and competition "directed towards the same social end by at least two individuals." The differences are that in cooperation, most, if not all, of the individuals will contribute towards the end. More recently, this view appears in the proponents of "cooperative learning" such as Johnson and Johnson (1975, 1986, 1989). For these researchers, as for Slavin (1983, 1985), cooperation is evaluated in terms of the success of the results to be obtained. Likewise, Doise and Mugny (1991) insist on the importance of results. In their case, the pay-off of coopera-

tion is cognitive development. This will be achieved only if there is at least minimal communication between the individuals. A third level of cooperation involves the quality of communication. The existence of a common aim is a necessary ingredient for cooperation, but is not sufficient on this view. A certain degree of interdependence is essential. Deutch, for example, insists on the quality of the process, as against the mere achievement of results. In contrast with Lewis and May and Doob, Deutch (1973) argues:

> The crux of the differences between competition and cooperation lies in the nature of the way the goals of the participants in each of the situations are linked. In a cooperative situation, the goals are so linked that everybody "sinks or swims" together, while in the competitive situation, if one swims, the others must sink.

In Stage 2, verbal exchanges are essentially limited to discussion of what role each individual will play, how the tasks will be divided, and so on. In Stage 3, communication extends to a discussion of the ends themselves. Furthermore, as noted above, the quality of this communication is important. Mere quantity of verbal exchanges will not ensure the achievement of the quality criteria. These criteria include listening attentively to the other, re-capturing the other's point of view even if opposed to one's own, synthesizing the views of others, attempting to find common ground or compromise where possible, re-casting other's arguments in different but equally valid form, and so on. The fourth stage is characterized by seeing cooperation as an end in itself. The features of earlier stages are all present—namely, friendly feelings (Stage 1), common ends (Stage 2), and quality of communication (Stage 3). They, however, are seen, as peripheral, compared to the central moral component of cooperation. This view is expressed in the writings of John Dewey (1944) who links cooperation to a sense of community. For Dewey, community is more than an association of people, even with common goals. It involves affective and intellectual components as well as a moral commitment. A desire to discuss with others involves respecting the other person, wanting to learn from her, even if she represents a point of view with which one profoundly disagrees. Both empathy as well as tolerance are necessary. But to talk of cooperation/community, one needs more than even empathy and tolerance. One has to relish and respond to another's differences. In Dewey's words:

> To cooperate by giving differences a chance to show themselves because of the belief that the expression of difference is not only a right of the other person's but is a means of enriching one's own life-experience is inherent in the democratic personal way of life.

The fourth-level notion of cooperation can also be found in Piaget's idea of mutual respect. As Piaget (1932) put it:

> Cooperation is really a factor in the creation of personality, if by personality we mean, not the unconscious self of childish egocentrism but the self that takes up its stand on the norms of reciprocity and objective discussion, and knows how to submit to these in order to make itself respected. (p. 91)

For intellectual exercises, such as philosophical dialogues, cooperation entails the personalization of every contribution. Our experience teaching philosophy to very young children has shown us how this kind of cooperation works in practice. One application of this moral cooperation within education can be

found in an approach to philosophical discussions with young children through a "community of inquiry." Based on work by Matthew Lipman and Ann Margaret Sharp, some of us have been working with teachers in both traditional French-speaking primary schools, and multi-ethnic schools, with children from many cultures, and backgrounds. Cooperation is at the level of the whole class, which transforms itself (students and teacher) into a community of inquiry. Philosophical novels are read together out loud, and questions and remarks are recorded and discussed. Initial comments are personalized with subsequent discussion emphasizing the respect for every individual's opinion while striving all the same to avoid the twin errors of relativism and dogmatism. Contrast this educational paradigm with that of Slavin (1991) and Johnson and Johnson (1989) discussed above in Stage 2. There, the operative example of cooperation is found in team sports. Cooperation is always a means in order to compete with some other group. It is perfectly possible for the members of the group to hate one another, but to fully cooperate for the sake of expediency. In the sense in which we are using Stage 4, it is not compatible with feelings of animosity. Playing a string quartet, or reflecting together in a community of inquiry involves a very different kind of cooperation. Piaget's elucidation here of the distinction between mutual *respect* and mutual *consent* is relevant:

> Personality is, thus, the opposite of the ego and this explains why the mutual respect felt by two personalities for each other is genuine respect and not to be confused with the mutual consent of two individual "selves" capable of joining forces for evil as well as for good. (p. 92)

What Piaget is here emphasizing is that respect (at least, mutual respect) involves an inescapably moral dimension. This is the essence of the difference between moral cooperation in the classroom (Stage 4) and the kind of expediency which can be found in the contrasting applications (Stage 2). There can be mutual consent for all kinds of things, but true respect can only be in the service of the good. In characterizing cooperation as an end in itself, both Dewey and Piaget highlight the importance of it being freely chosen. If one sees cooperation as truly good, it cannot be imposed by others. This, again, is unlike the cooperation at earlier levels.

Developmental Stages

The four stages or levels we are suggesting are neither simply theoretical, nor simply empirical. They are rather like Piaget's findings in genetic epistemology. A higher stage is a synthesis of lower stages and presupposes the ingredients of the lower stages. Furthermore, one will necessarily conceptualize in terms of the earliest stages before the later ones. As a parallel, let us again consider Piaget's work on lying. Prior to determining whether and why children see lying as bad or good, he proposed to see how they understood the concept. He found that an earlier comprehension in terms of "not telling the truth" inevitably preceded the more complicated idea of "intentionally deceiving." Clearly, the higher stage includes elements from the lower stage. Equally clearly, Piaget's findings were not simply empirical. There is a certain necessity to finding that a emphasis upon consequences will precede a consideration of intentions. No human being will ever master intentions before consequences, although throughout life, adults, like children, will continue to make use of both.

Higher stages are often mixed, including elements of the earlier levels. There have been at all ages (including adults, in research since Piaget) transitory levels where people hesitate between lower-level conceptions with an emphasis on consequences and higher-level ones where there is some consideration of intentions. In the case of cooperation, our four stages are upheld by the findings in the relevant developmental studies (Schleifer and Fitch, 1973). The stages are significantly age-related although, as noted, there are traces of each stage at every age-level. Even Stage 1 does not ever entirely disappear! As with Piaget's moral and mathematical concepts, the order of these stages has a certain necessity. Children (and even some adults) will first begin with the more global conceptions (cooperation is not fighting) and gradually begin to differentiate in terms of specific ingredients (common goal, interdependence, and communication). The empirical findings and the conceptual analysis on cooperation mutually support one another in just the way Piaget's work on moral, mathematical, and scientific concepts was meant to do. These stages are invariant and universal, again in Piaget's and Kohlberg's sense. That is to say, one cannot skip any stages or reverse the order by, for example, first conceptualizing in terms of Stage 4, and only later in terms of Stage 1. Unlike Piaget, who often provided age-norms for his stages, we consider the stages as readily applicable to adults as well as to children. In this, we conform to the more modern research on stages which shows that children are often capable of very sophisticated reasoning at an age earlier than Piaget thought (see, for example, Schleifer and Shultz 1983; Bryant 1984; Lefebvre-Pinard, Shultz, Wright and Schleifer, 1986). Adults are often equally capable—again, Piaget has been shown to be in error—of lower-level reasoning in regard to moral as well as mathematical and scientific concepts. The stages can involve sub-stages as well. Thus, Stage 1 (good feelings) may be further sub-divided according to whether the quality of feelings is considered. Stage 1b would show the beginnings of differentiation between good acts which are cooperative and those that are not, without being able to specify a criterion. At Stage 2 (common aim), the distinction is between positing a common aim, and 2b, considering the possibility of the common aim leading to interdependence. Stage 3 considers levels of interdependence and communication. Here the sub-stages could refer to the degree of consideration to different qualities of communication. Stage 4 is the most integrated stage for it incorporates ingredients from the earlier stages, and leads to a specific, moral conceptualization of cooperation. Like Stage 1, Stage 4 cooperation is associated with good feeling. Unlike stage 1, however, it links the good feeling to cognitive elements from Stage 3 (communication) and Stage 2 (common aim). Elements of altruism are mentioned in earlier stages (Orlick in Stage 1, Block-Lewis in Stage 2). Only Stage 4 highlights the moral component of cooperation—namely, its characteristic as an end-in-itself. We now turn to the results of study which look at these changing concepts of cooperation.

Cooperation in the philosophical approach to mathematics

At present, we are extending the Philosophy for Children (P4C) program to the areas of mathematics and science. Here, new "novelettes" in the style of Lipman and Sharp have been created along with the pedagogical guides and exercises. These materials focus on mathematics and scientific concepts with the aim of philosophizing about them (Daniel, 1994; Daniel, Lafortune, Pallas-

cio and Sykes, 1995). Teachers have used the materials in their classrooms, and experimented with the approach. We have just completed a study of this sort of application of P4C to mathematics education at the primary level. We looked at the impact of P4C on changing attitudes and changing thinking skills. These results are presented elsewhere (Daniel, Lafortune, Pallascio, Schleifer, 1998, sous presse). One strand of our study looked at P4C in the classroom, and what effect it might have on children's concepts of cooperation. This strand is the object of the present paper.

Subjects

Three schools with children of 9-11 (4th to 6th grade) participated in the study. Two of the schools were "traditional" with the teacher responsible for the grade-level. The third school was an "alternative" school in which parents were more directly involved in the classroom, grades were sometimes mixed, and small-group work was highly encouraged.

Procedure

In all three schools, teachers were asked to use the "community of inquiry" approach in which children discuss topics inspired by the novelette, or by their own questions. The choice of topic belonged to the group. These sessions were held once a week from October to May. In addition, the teachers were asked to try small-group discussions at least two or three times during the school year. Our concept of cooperation questionnaire was administered in the fall, and again in the spring. Four children in each school were selected after post-testing to offer justifications for their ratings on the questionnaire.

Instrument

Eight different case themes were devised in which four children (two girls, two boys) were working on a project in mathematics or science. Each such theme was cast into eight different forms reflecting different information about cooperation; in particular, information was provided concerning the amount of communication between students, on whether it was a large group (the whole class) or a smaller one (four children), whether the activity was organized by the teacher or more spontaneous, and whether the small group was homogeneous (all at the same level in "math" or science) or heterogeneous (two strong, two weak). A ninth "control" condition was added which reflected no common goal, with four children each working at home. Subjects were asked to rate the level of cooperation on an eleven-point scale, ranging from "not at all," to "complete cooperation." As in previous research (Schleifer and Fitch, 1993), a number of children were interviewed and were asked to justify their ratings.

Design

A Latin square was used to pair each of the eight forms with each of the eight themes. The eight different questionnaires resulting from this pairing were randomly distributed to all the students. Thus, each subject received eight cases, one of each form and one of each theme, with no repetitions of form or theme. Every subject also was given the same "control" condition. This ninth condition was identical on all questionnaires.

Results

The ratings of cooperation were subjected to a 2-by-3-by-2 analysis of variance with gender, school, and time (pre-post) serving as between subject factors, and form of cooperation-information as a within-subject factor. For each variable, the main effect of form was found to be significant, and was broken down into one degree of freedom planned comparisons between means.

Significant differences in regard to concepts of cooperation between pre-testing and post-testing were as follows :

1) A significant number of children, who had rated cooperation as present even in the control condition (five children sitting at home, without interaction) in pre-testing, altered their views in post-testing. Here, they discriminated between cooperation with common aim and without. This can be seen as shifting from Stage 1 or Stage 2 levels of cooperation.

2) This tendency was strongest for girls, who had rated "good behaviour" as cooperative significatively more than boys, and who altered their views as in 1) above.

3) A significant shift in view of cooperation in regard to the large group-community was evident. Significant numbers of children who had rated this as having less cooperation on pre-testing changed their view in post-testing. This can be interpreted as a shift towards the Stage 3 conception of cooperation where communication-quality is judged as important.

4) The shift was particularly evident in the "alternative" school which stressed small-group projects. Here, the shift of 3) was most marked. For the first time, this school experienced communication in a large group—namely, the Philosophy for Children community of inquiry.

5) In all three schools, we found that small groups organized by the teacher were seen as leading to less cooperation than those which were "spontaneous," particularly where the groups were heterogeneous (two children good in mathematics and two bad). Although these means increased significantly for post-testing, they remained significantly lower than others throughout the year. This finding highlights the importance of the group having the element of being freely chosen. This factor can be important in Stage 1 as well as a Stage 4 levels of conceptualization.

Discussion

The results help solidify the validity of our theory about levels of cooperation-conceptualization. The earlier study (Schleifer and Fitch, 1993) showed developmental age-trends in accordance with the four-tiered theoretical levels. The present study indicated that experience with different kinds of cooperation will change children's conceptual levels, and in accordance with the theory. Although there was no comparison with a control group, the changes occurred relatively rapidly during the course of the year as opposed to developmental growth, which is often measured in years. This is some indication that the changes were due to the P4C approach. Thus, a significant number of children changed from seeing cooperation as "feeling good" to a notion in terms of common aims. Likewise, a significant number altered their view that cooperation had to be limited to a small group (Stage 2) to considering the level

of communication which could be operative in a larger group (the community of the classroom) which is at the Stage 3 level. Finally, there was the persuasive finding that organized groups are seen as significantly less cooperative by many students. This is probably because they are often mistrusted and feared by the students. Here, the explanations given by the students for their ratings helped confirm this interpretation. In interviews, they often mentioned that groups would remain competitive and individualistic. The teachers also confirm this impression in their written notes. They often commented on the egoism shown by the students in the small groups. This is very much in line with the findings of Thorkildsen (Thorkildsen and Jordan, 1996). She and a first-grade teacher tried implementing the Johnson and Johnson paradigm in a class which had functioned quite well. The children, who had cooperated very well before the experiment, exhibited fights for power, control, and competition. The conclusion of the experimenters was that they had underestimated the importance of the free choice of the students in regard to their group-work. The one factor which emerged as the most important was their having assigned groups, the most important negative for the children:

> By assigning students to groups, we had inadvertently put excessive restraints on the spontaneous creativity and communication of ideas that normally dominated Candace's classroom. . . . We had made it more difficult for good ideas to spread slowly throughout the class, because students were less free to approach non-group members who might otherwise help them. Application of the metaphor of football team spirit, used by some cooperative learning-theorist's (e.g. Slavin, 1983, 1991b; Johnson and Johnson, 1975) led these students to restrict their thinking to match that of their group members, or to quit doing tasks when their views did not conform. (p. 217)

The teacher had asked the professor of psychology for help in working on cooperation in the classroom. The spontaneous approach was to be supplemented with the "correct" approach, inspired by the work of Johnson and Johnson. In this instance, the lesson was that the spontaneous approach had at least the advantage of not leading to resentment, competition, problems of power, and credit. Teachers are, however, very much on the lookout for help in installing cooperative efforts in the classroom, as parents and governments are suggesting that cooperation in education is a good thing. If "cooperative learning" (à la Johnson and Johnson) often proves no better than the spontaneous measures by the teacher, this does not indicate that educators should be left alone. One must look at other models of cooperation which do not stress groups competing for rewards, in terms of results, as does "cooperative learning." It is a matter of matching our educational practice to the appropriate level of concepts of cooperation. Cooperative learning, as noted above, is a Stage 2 level. The cooperation which education deserves will involve a moral component, which begins to appear gradually at all levels, but is only full-blown at Stage 4, where we cooperate freely, out of choice, and in full respect of others.

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