

Group Rewards Make Groupwork Work

Response to Kohn

Teachers should try to make what they teach cooperative learning groups intrinsically motivating, but if they want to encourage students to expend the effort to truly master a subject, they should use rewards.

One of the poignant ironies of the cooperative learning movement is that the educators and researchers most often drawn to such a humanistic, prosocial form of instruction are the very people most likely to be ideologically opposed to the use of rewards for learning. Yet classroom research over two decades has consistently found that in elementary and secondary schools, the positive effects of cooperative learning on student achievement depend on the use of group rewards based in the individual learning of group members (see Slavin 1988, 1989/90, 1990; Newmann and Thompson 1987; Davidson 1985; Johnson and Johnson 1989). There are a few exceptions, but almost every study of cooperative learning in which the cooperative classes achieved more than traditional control groups used some sort of group reward.

For example, in our own research this reward usually consists of certificates for teams whose average performance on individual assessments exceeds a pre-established standard of excellence (Slavin 1986). The methods of Spencer Kagan (1989) employ similar rewards. David and Roger Johnson (1987) often recommend giving grades on the basis of group performance (a practice I oppose on ethical grounds, but that's another story). Shlomo Sharan and his colleagues

(Sharan and Shachar 1988) evaluate group projects to determine which group members contributed unique elements—an appraisal that can be seen as a type of reward.

Nintendo versus Shakespeare

In this issue Alfie Kohn (p. 83) makes a case against the use of cooperative rewards. This case rests on two major arguments. The first is that extrinsic rewards undermine intrinsic interest

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and that this effect is likely to apply to cooperative learning. The second is that there are effective alternatives to the use of group rewards; thus, they are unnecessary.

Kohn's reading of research on the "undermining" effect of rewards is extremely narrow and therefore misleading. He is correct in saying there are many studies that demonstrate this undermining effect, but he fails to note there are at least as many studies that show just the opposite: that rewards *enhance* continuing motivation or that they have no effect on continuing motivation.

In the classic experiment in this area, preschoolers who freely selected drawing with felt-tipped markers from among a choice of activities were rewarded for drawing with the markers. Afterwards, these students were less likely to choose a drawing activity than were similar students who were never rewarded (Lepper et al. 1973). This experiment, which has been replicated many times, does show that rewards can undermine intrinsic interest. However, the experiment involves a very short time period (usually about an hour), preschool children, an artificial setting, and a task unlike most school tasks. Does the undermining effect apply in situations more like typical elementary and secondary classrooms? Scores of studies have been done to

test the limits of this finding, and the results certainly do not support the simplistic view that rewards are bad. Perhaps the most important counterevidence is the consistent finding that rewards *increase* motivation when the task involved is one that students would not do on their own without rewards (Bates 1979, Morgan 1984, Lepper and Greene 1978).

I don't know many students who would put away their Nintendo games to do complex math problems, to write reports on the economy of Brazil, to write essays comparing Shakespeare and Molière, or to learn to use the subjunctive case in French. Students will productively fool around with science equipment or learn from visits to museums, and there is no reason to reward such intrinsically motivating activities. There is also a need for teachers to try to make everything they teach as intrinsically interesting as possible. But students are unlikely to exert the sustained, systematic effort needed to truly master a subject without some kind of reward, such as praise, grades, or recognition. Besides, try to imagine a highly motivated scientist who has not been rewarded for doing science, a singer who has not been rewarded for singing, an inventor who has not been rewarded for inventing. Outstanding achievement always produces extrinsic rewards of some kind; how else, then, do outstanding achievers maintain their motivation?

Many other aspects of the undermining effect show how little it is likely to apply to real school situations. One is the finding that rewards given over a period of days or weeks do not diminish intrinsic motivation (for example, see Vasta et al. 1978). Other studies find that rewards enhance intrinsic motivation if they convey information on performance relative to others (e.g., Boggiano et al. 1982) or if they are social rather than tangible (Lepper and Greene 1978, Deci and Ryan 1985).

It is clear, then, that the undermining effect of rewards on continuing motivation exists, but it is equally clear that it operates in a narrow set of

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circumstances, it applies only to activities students would engage in without rewards, to short-term reward situations, and to concrete rather than social rewards. No study has ever shown an undermining effect of rewards in a cooperative learning context. At least one study (Hom et al. 1990) found that cooperative learning enhanced intrinsic motivation. There is no reason to expect that cooperative learning would undermine intrinsic interest.

Ensuring Success

Can cooperative learning be successful without rewards? The research cited earlier suggests that this is unlikely, although Kohn mentions the Child Development Project in San Ramon, California, as an example of how cooperative learning can work without cooperative rewards. This study has indeed fastidiously avoided the use of group rewards. Studies of the program have shown that after five years of cooperative learning (from kindergarten through 4th grade), students performed academically no better than did students in traditionally organized schools (Solomon et al. 1990). This contrasts with the results of 35 studies of cooperative methods that used group rewards and individual accountability, in which cooperative classes achieved a median of 32 percent of a standard deviation more than tradi-

tional classes on achievement measures (see Slavin 1990). Overall, the median difference in achievement between forms of cooperative learning that used neither group goals nor individual accountability and traditional methods was a trivial 5 percent of a standard deviation. Cooperative methods without group rewards have been successful in enhancing outcomes other than achievement, but the need for rewards in increasing achievement is clear.

Why are group rewards necessary in cooperative learning? Evidence points to several factors. First, a key explanation for the effects of cooperative learning on achievement is that it creates peer norms favoring achievement (see Slavin 1983). That is, students in cooperative learning say that their groupmates' achievement is important to them. Without group rewards, why should a groupmate's achievement be important? Cooperative learning works (for achievement) only when students are actively explaining ideas to each other, not simply giving each other answers (Webb 1985). An altruistic student is likely to "help" a partner by giving answers, but to do the much tougher (and less friendly) job of *teaching*, the partner's learning must be important to his or her teammate. Without group rewards based on the learning of all group members, cooperative learning can degenerate into answer-sharing. At the same time, many students are reluctant to ask a fellow student for help (Newman and Goldin 1990). The fact that all students are striving toward a common goal helps students overcome this reluctance, since the student asking for help knows it is in the interests of the student giving help to do so.

The idea that group rewards are alternatives to no rewards is, of course, absurd. With the possible exception of Summerhill, just about every school in the world uses grades, praise, recognition, and other rewards to maintain student motivation. Cooperative learning simply focuses the classroom reward system on helping others learn (as well as on one's own learning).

Celebrating Good Work

Perhaps someday someone will come up with a form of cooperative learning that will work without cooperative rewards. Sharan and Shachar (1988) have a successful program that deemphasizes group rewards and solves the answer-sharing problem by giving each student a unique task in a group investigation, but this program has been used successfully only for social studies projects (and only in Israel). For the bulk of the elementary and secondary curriculum, however, the idea that cooperative rewards can be dispensed with in cooperative learning is wishful thinking, and the idea that such rewards will undermine intrinsic interest or continuing motivation is unproven and unlikely.

Remember, the rewards we're talking about are generally paper certificates (current street value: \$.02). Kohn (and others) would oppose rewards on ideological grounds, regardless of their achievement effects. But to me it just doesn't seem excessive to give kids a fancy certificate if they've done a good job as a team. All it does is make tangible the teacher's pride and satisfaction with their cooperative efforts. Is that so terrible? □

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