Psychological Processes in Cooperative Language Learning: Group Dynamics and Motivation

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Cooperative learning (CL) has been found to be a highly effective instructional approach in education in general and this has been confirmed with regard to second language (L2) learning as well. This article investigates reasons for the success of CL from a psychological perspective, focusing on two interrelated processes: the unique group dynamics of CL classes and the motivational system generated by peer cooperation. It is argued that the affective domain of CL plays a crucial role in the educational potential of the method. This paper summarizes the specific factors that contribute to the promotion of learning gains. While the analysis concerns cooperatively structured learning only, it is assumed that the processes described have a broader relevance to understanding the success of peer collaboration in general.

COOPERATIVE LEARNING (CL), THE INSTRUCTIONAL use of small groups in order to achieve common learning goals via cooperation, has made an almost unprecedented impact in education during the last two decades. According to Johnson, Johnson, and Smith (1995), CL is one of the most thoroughly researched areas in educational psychology. As they assert,

We know more about cooperative learning than we know about lecturing, age grouping, departmentalization, starting reading at age six, or the 50-minute period. We know more about cooperative learning than about almost any other aspect of education. (p. 4)

The explanation for this interest in CL is very simple: Investigations have almost invariably indicated that CL is a highly effective classroom intervention, superior to most traditional forms of instruction in terms of producing learning gains and student achievement, higher-order thinking, positive attitudes toward learning, increased motivation, better teacher-student and student-student relationships accompanied by more developed interpersonal skills and higher self-esteem on the part of the students. Furthermore, CL appears to be applicable “with some confidence at every grade level, in every subject area, and with any task” (Johnson et al., 1995, p. 4).

Although there were attempts to introduce CL principles in language instruction over 15 years ago (Gunderson & Johnson, 1980), CL has only recently become an area of major interest in the L2 field. By now a fairly solid body of literature has accumulated, including two edited volumes containing a rich selection of conceptual and research studies (Holt, 1993; Kessler, 1992), a number of journal articles (e.g., Bejarano, 1987; Chang & Smith, 1991; Jacob, Rottenberg, Patrick, & Wheeler, 1996; Milleret, 1992; Szostek, 1994), as well as some practical language teaching materials specifically developed for the purpose of CL (e.g., Coelho, Winer, & Olsen, 1989). In addition, in her well-known book on small group work, Cohen (1994) devotes a whole chapter to discussing the bilingual classroom, which includes foreign language classes.
An interesting question is why L2 researchers have only started to discover CL relatively recently. One reason is that small group work has been part of L2 methodology for a long time and, therefore, CL may have appeared to offer nothing startlingly new. However, typical group work activities associated with communicative language teaching are not equivalent to CL, because the small group format is not the essence of CL. While it is true that communicative group work (such as role play or problem-solving tasks) is a prerequisite to CL and frequently embodies certain CL principles, small group activities in L2 classes often are not cooperative in nature, or they underutilize CL principles.

There are many ways of looking at cooperative language learning. The focus of this paper is not the analysis of how group interaction inherent to CL promotes the acquisition of the L2. For this, the reader is referred to the excellent summaries by McGroarty (1993) and Kagan and McGroarty (1993), and the seminal paper of Long and Porter (1985) that describes how the increased amount and variety of target language output and input in group work facilitates L2 development. Rather, I argue that by focusing on the psychological dimension of CL, we can find the key to its effectiveness in the affective domain. I highlight two interrelated psychological processes underlying CL which, I propose, contribute significantly to the outstanding learning potential of the method: (a) the unique group dynamics inherent to the CL process that generate a supportive learning environment characterized by strong cohesiveness among learners, and (b) the motivational basis of CL which underlies student achievement gains.

It is interesting to note that the approach I have taken in this paper bears a close resemblance to a framework recently set up by Slavin (1996), who identified three major theoretical perspectives to explain the achievement effects of CL: motivational, social cohesion, and cognitive. The first two perspectives are a direct match for the two psychological processes in this article. The cognitive perspective "holds that interactions among students will in themselves increase student achievement for reasons which have to do with mental processing of information rather than with motivations" (Slavin, 1996, p. 48). Thus, the cognitive perspective is analogue to increased language learning through interaction, cited above.

The focal issue of this article—the psychological processes forming the affective foundation of cooperative language learning—is relatively "subject-matter-free," which means that these processes are not so much dependent on the actual target of learning (i.e., the mastery of the L2) as on more basic components of the learning process such as the relationships and interactions among learners and the psychological processes involved. Much of the research support for the arguments made here is drawn from first language (L1) contexts, without conclusive evidence that the results are directly transferrable to the L2 field. Although the increasing amount of knowledge about CL in L2 classrooms (see references above) has generally confirmed the validity of the claims made in nonlanguage classrooms with regard to language learning, more focused research is needed to decide to what extent nonnative speakers from different cultures and with different cultural expectations about student and teacher roles, group work, and interpersonal communication respond to CL in the same way as the (primarily North American and Israeli) first language users among whom the approach has been developed. It would also be interesting to see whether cooperative language learning works equally well with, for example, adults in evening language courses as with pupils in ordinary school contexts.

COOPERATIVE LEARNING IN A NUTSHELL

Cooperative learning has been defined in different ways and implies several related methods of organizing and conducting classroom instruction. However, three key components of CL make a learning approach "cooperative." First, learners spend most of the class time working in small groups of between 3 and 6 students. Second, learning is structured so that group members are motivated to ensure that their peers have also mastered the material or achieved the instructional goal, and therefore an intensive process of cooperation is generated, involving various creative collaborative learning strategies. Third, evaluating and rewarding the group's achievement in a CL class becomes as important as or more important than evaluating and rewarding individual achievement.

A good way to understand the essence of CL is by contrasting it with competitive and individualistic classroom structures. In the former, only the best students are rewarded so that students are forced to work against each other in an attempt to outdo their classmates. This situation encourages the survival of the fittest. Competitive learning can be characterized by a negative interde-
dependence among students. The learners' goals are "so linked that there is a negative correlation among their goal attainments" (Deutsch, 1962, p. 276). In an individualistic classroom structure, by contrast, there is no interdependence. Students are required to work independently and the probability of achieving a goal or reward is neither diminished nor enhanced by the presence of a capable other. The cooperative classroom, on the other hand, is characterized by a positive interdependence of the students. As Johnson et al. (1995) summarize, positive interdependence occurs "when one perceives that one is linked with others in a way so that one cannot succeed unless they do (and vice versa) and/or one must coordinate one's efforts with the efforts of others to complete a task" (p. 31). In other words, positive interdependence is the belief that students "sink or swim together" (p. 31).

Positive interdependence results in *promotive interaction*, which can be defined as "individuals encouraging and facilitating each other's efforts to achieve and complete tasks, and produce in order to reach the group's goals" (Johnson et al., 1995, p. 20). Students are divided into small groups and learning takes place in these basic social units through peer teaching, joint problem solving, brainstorming, and varied interpersonal communication, as well as through individual study monitored by peers. Thus, in a cooperative learning situation, as the name indicates, everything is centered around the process of cooperation, that is, giving and receiving ideas and clarification, providing task-related help and assistance, exchanging needed resources (e.g., information or materials), and providing constructive feedback (Johnson et al., 1995; Sharan, 1995).

The key question is, how can positive interdependence be achieved? That is, how can learners be "motivated" to cooperate? Olsen and Kagan (1992) list five principal ways to accomplish CL structures:

1. **Structuring the goal**: Groups work towards a single team product (e.g., joint performance).
2. **Structuring the rewards**: In addition to individual scores or grades, some sort of team score is also calculated and joint rewards or grades are given for the group's overall production.
3. **Structuring student roles**: Assigning different roles to every group member so that everybody has a specific responsibility (e.g., "explainer," "summarizer," or "note-taker").
4. **Structuring materials**: Either limiting resources so that they must be shared (e.g., one answer sheet for the whole group) or giving out resources (e.g., worksheets, information sheets) which need to be fitted together (i.e., the jigsaw procedure).
5. **Structuring rules**: Setting rules that emphasize the shared nature of responsibility for the group product (e.g., no one can proceed to some new project or material before every other group member has completed the previous assignment).

Besides positive interdependence, Johnson and Johnson (1995) mention three other conditions necessary for the effectiveness of CL: individual accountability, mastery of social skills, and regular group processing. They argue that CL works best when the group rewards for learning are combined with individual accountability in order to ensure that participants perform their share of the work. In these CL formats, students are individually quizzed and receive recognition based on the sum of all team members' scores.

Social skills may need to be taught; simply placing students in a learning group and expecting them to cooperate effectively may not be successful. As Johnson and Johnson state, "We are not born instinctively knowing how to interact effectively with others. Interpersonal and group skills do not magically appear when they are needed" (1995, p. 122). This is particularly true in ethno-linguistically heterogeneous L2 classrooms, where the cultural dissimilarity among the students is a further source of divergence in the skills necessary for high quality cooperation, such as leadership, decision making, trust building, communication, and conflict-management skills. (For classroom recommendations on how to teach these skills to students by open modeling and controlled practice, see Cohen, 1994; Ehrman & Dörnyei, in press).

Finally, according to Johnson and Johnson (1995), effective group work is influenced by whether groups regularly reflect on how they are functioning, what has been conducive to completing the tasks, and how they should continue or change—thus engaging in group processing. Such processing enhances group maintenance, facilitates acquisition and practice of social skills, reminds members of the group norms, and gives members feedback on their participation.

**GROUP DYNAMICS IN COOPERATIVE LEARNING**

CL has been rooted in a social psychological approach to the study of small groups. Its innovation and strength lies almost entirely in the conscious and systematic exploitation of the principles of group dynamics to enhance student
learning outcomes. In this section, a group dynamics-based analysis of CL is applied in order to see how the necessary conditions of interaction and cooperation develop.1

Group dynamics concerns the analysis of the behavior of small groups, generally about 4 to 20 members (for more detailed overviews of the principles of group dynamics from a L2 perspective, see Dornyei & Malderez, 1997; Ehrman & Dornyei, in press).2 The educational applicability of group dynamics rests on three factors:

1. Most organized learning occurs in some kind of group (e.g., classes, seminars, workshops, discussion groups).
2. Group characteristics and group processes significantly contribute to success or failure in the classroom and directly effect the quality and quantity of learning within the group.
3. Theoretical and practical knowledge about group dynamics might assist teachers to create learning environments where learning is a rewarding and efficient experience. An awareness of the principles of group dynamics can also help teachers to make classroom events less threatening, develop more efficient classroom management, and develop creative, well balanced, and cohesive groups.

Group Cohesiveness and Instructed Language Learning

One concept central to the explanation of many group-related phenomena is group cohesiveness, or “the strength of relationship linking the members to one another and to the group itself” (Forsyth, 1990, p. 10). It is an index of the level of group development, directly related to within-group cooperation and to both the quality and quantity of group interaction (see Bar-Tal & Bar-Tal, 1986; Greene, 1989; Shaw, 1981). Three recent meta-analyses of past studies addressing the relationship between group cohesiveness and group performance found a significant positive relationship between the two variables, indicating that cohesive groups, on average, tend to be more productive than noncohesive groups (Evans & Dion, 1991; Gully, Devine, & Whitney, 1995; Mullen & Copper, 1994).

The cohesiveness-performance effect can be particularly strong in language classes in which the learners’ communicative skills are developed primarily through participatory experience in real world language tasks. In these contexts, communication is unfolded and enlivened in positive relationships, and the warm, cohesive group cli-
success in goal attainment, and personal instrumental benefits.

6. Successful completion of whole group tasks and a sense of group achievement.

7. Joint hardship that group members have experienced (e.g., carrying out some difficult task together).

8. Intergroup competition (e.g., games in which groups compete); this has been found to bring together members of small groups.

9. Common threat, which can involve, for example, the feeling of fellowship before a difficult exam.

10. Group legends, which are an efficient way of “pumping up group pride” (Mullen & Copper, 1994, p. 224); these may involve building up a kind of group mythology, giving the group a name, and inventing characteristics for the group.

11. Investing in the group to create cohesiveness.

12. Public commitment to the group to strengthen a sense of belonging.

13. Defining the group against another, that is, emphasizing the distinction between “us” and “them,” a powerful but potentially dangerous aspect of cohesiveness.

Group cohesiveness is also fostered by leadership and teaching styles. The way leaders live out their role and encourage a feeling of warmth and acceptance can also enhance group cohesiveness. Kellerman (1981) argues that a prerequisite for any group with a high level of cohesiveness is a leader whose presence is continuously and strongly felt: “highly cohesive groups are those in which the leader symbolizes group concerns and identity and is personally visible to the membership” (p. 16). Indeed, one of the surest ways of understanding the cohesiveness of a group is for the leader to be absent, either physically or psychologically (the latter idea referring to insufficient care for the group and its goals).

In addition, an efficient group leader’s task is not so much to lead the group but rather to facilitate it, that is, to create the right conditions for development, in particular a safe and accepting climate, and to enable the group to do away with any emerging obstacles. Seen from this perspective, the traditional autocratic teaching style, whereby the teacher makes virtually all the decisions, dictating policy and actions, never discussing the schedule or asking for input from the members, is an obstacle to group development because it does not allow for the group to structure itself organically, or for the members to share increasing responsibility. The instructor who aims to be conscious of group dynamics should adopt a more “democratic” teaching style and be “prepared to step aside to give the learner a meaningful role” (McDonell, 1992, p. 169), only intervening when necessary. As Ehrman and Dörnyei (in press) summarize, democratic leaders involve the group members in decision making about their own functioning, share with them the long-term goals and steps to be taken to achieve these, and take part in the activities themselves. That is, they consciously distribute influence and promote learner autonomy: Students are given positions and tasks of genuine authority, are invited to design and prepare activities themselves, and are encouraged to take part in project work and peer teaching.

Cohesiveness and the CL Process

Nearly all reports on CL projects highlight the improved interrelations among students and between the students and the teacher. Researchers assert that CL is particularly effective in creating cohesive groups (see Johnson & Johnson, 1995). This increased group cohesiveness can be explained by three main reasons.

First, CL methodology consciously recognizes the importance of team building, emphasizing the necessity of spending initial time training CL skills such as building trust, providing leadership, and managing conflicts. CL also contains regular self-evaluation, which ensures that any potential intermember tensions are properly processed.

Second, the emerging cohesiveness in CL classrooms is also the function of the special dynamics of the CL process, which organically includes several of the cohesiveness-promoting factors listed above. The small group format and the positive interdependence among students provide proximity, contact, and interaction. Promotive interaction through coordination and communication requires understanding each participant’s needs, interests, and abilities, and results in knowing each other on a personal level, “rather than as complexes of performances (what persons do)” (Johnson & Johnson, 1995, p. 104). Although there is usually no joint hardship or common threat, CL formats often include intergroup competition. Because of the supportive environment and a lack of face-threatening competition, group experience for learners is typically rewarding. Because the CL process centers on the successful completion of group tasks, student satisfaction is further enhanced. Furthermore, as Johnson and Johnson argue, promotive interaction includes the public commitment to
accomplish the group goals as well as considerable investment of time and energy toward this, which results in a growing attachment to the task and the group.

Third, students in cooperatively structured classes are in control of organizing their own learning, that is, there is considerable learner autonomy. The dominant small group format simply excludes the teacher from the primary student communication networks and considerably decentralizes the decision-making process in the classroom, providing learners with an opportunity for self-regulation (Sharan & Shaulov, 1990). Learner autonomy is also ensured by the teacher's democratic teaching style, mentioned earlier.

In sum, based on the numerous factors promoting cohesiveness listed above, we may conclude that the dynamics of the CL process support the main conditions for organic group development and the emergence of a mature, well-balanced internal class structure, characterized by strong student cohesiveness. This cohesiveness is a strong mediator of CL processes on learning outcomes because it is a necessary requirement for communicative task involvement, and, as discussed below, it also fosters student motivation to learn.

THE MOTIVATIONAL BASIS OF STUDENT ACHIEVEMENT IN COOPERATIVE LEARNING

The superior task performance and learning achievement repeatedly observed with students in cooperatively structured classrooms (for reviews, see Cohen, 1994; Johnson & Johnson, 1995) would not occur without a powerful motivational basis energizing the CL process. Cooperative goal structure and the learning format that characterize CL generate a special motivational system, which is largely responsible for the efficiency of CL.

Dörnyei (1994) argues that the motivational complex underlying instructed L2 learning is a multidimensional construct comprising at least three fairly independent levels: (a) the language level (concerning ethnolinguistic, cultural-affective, intellectual, and pragmatic values and attitudes attached to the target language and its speakers); (b) the learner level (concerning various fairly stable personality traits that the learner has developed in the past); and (c) the learning situation level (concerning situation-specific motives rooted in various aspects of language learning in a classroom setting) (see Table 1). The most important impact of the CL process on learner motivation occurs at the learning situation level, but continuous exposure might influence motivational processes at the learner level as well.

Motivational Components at the Learning Situation Level: Group-Specific Motives

Swezey, Meltzer, and Salas (1994) point out that most theories of motivation attempt to explain motivational processes at the individual level, even though action conducted within groups might show motivational characteristics that stem from the group as a social unit rather than from the individual members. Because in educational contexts this claim appears to be particularly valid, Dörnyei's (1994) model of L2 motivation includes a set of group-specific motivational components related to four aspects of group dynamics: classroom goal structures, group cohesiveness, goal-orientation, and the norm and reward system. Let us examine how these group properties affect motivation in cooperative classrooms.

Classroom Goal Structure. The classroom goal structure in CL is centered around positive interdependence and the resulting process of cooperation. L2 studies investigating the motivational role of cooperativeness confirm the positive effect found in L1 classrooms. In her conceptual analysis, Ushioda (1996) concludes that collaborative learning in itself can create the appropriate psychological conditions for intrinsic motivation. Julkunen's (1989) investigation of the effects of competitive, individualistic, and cooperative goal structures on L2 motivation supports the superiority of CL. Julkunen and Borzova's (1996) results indicate that students tend to prefer CL situations to individualistic and competitive ones, and the researchers also found a significant positive relationship between cooperative goal structures and various aspects of L2 learning motivation.

Group Cohesiveness. The fact that group cohesiveness has a positive impact on further motivation to learn was made explicit by Deutsch (1962) in his initial theory of cooperation, which stated that promotively oriented groups would show more achievement pressure. In a summary of research on the effect of cohesiveness on learner dispositions and behaviors, Johnson and Johnson (1995) verified this assumption. Furthermore, in their study of classroom motivation to learn a L2, Clément, Dörnyei, and Noels (1994) confirmed that group cohesiveness is indeed an important component of L2 motivation. This might be due
Components of Foreign Language Learning Motivation

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Note. Adapted from Dörnyei, 1994, p. 280.

* Components assumed to be affected by the CL-generated motivational system.

to a sense of obligation and moral responsibility to the group. The group’s goal-oriented norms have a strong influence on the individual. In cohesive groups, the likelihood of “social loafing” and “free-riding” (i.e., doing very little actual work while still reaping the benefits of the team’s performance) decreases. In addition, positive relations make the learning process more enjoyable, thus promoting intrinsic motivation.

Goal-Orientedness. The extent to which the group is attuned to pursuing its goal (in our case, L2 learning) is referred to as “goal-orientedness.” In school contexts the “official group goal” (mastering the L2) may not be a goal at all. Furthermore, members may not show the same degree of commitment to the group goal. However, due to the positive interdependence among students in CL, we can expect individual and group goals to converge more than in other educational contexts. This has been supported by Nichols and Miller (1994), who found that students in CL classes were more goal-oriented than students participating in traditional instruction.

Norm and Reward System. One aspect of positive interdependence is the fact that rewards are contingent upon group performance. As a result, because the whole group benefits from a member’s high academic achievement, we do not find the common peer pressure against doing academic work in cooperatively structured classrooms. The “norm of mediocrity,” which exists in many educational contexts, results in learners suffering social consequences for academic success, which is reflected in labeling hard-working students “teacher’s pet,” “nerd,” or “brain” (Daniels, 1994, p. 1011). In contrast, Daniels found that the norm system of CL results in learners gaining social approval for academic excellence and helping each other to achieve this. This type of norm system exerts a powerful influence on group members’ attitudes, values, and actions. Students in cooperatively structured classrooms are motivated to excel by their need for social approval and by the wish to avoid negative sanctions for not doing their fair share in working towards group success (Ames & Ames, 1984; Johnson & Johnson, 1995).
Teacher-Specific Motives

The primary teacher-specific motive in CL concerns the teacher’s authority type. As described before, CL is typically accompanied by a democratic leadership style that fosters learner autonomy. Research shows that although controlling classroom contexts may result in higher short-term productivity, autonomy-supporting classroom contexts lead to a higher level of long-term, intrinsic motivation (see, for example, Ames, 1992; Deci, 1992; Klein, Erchul, & Pride-more, 1994; Swezey et al., 1994; Sharan & Shaulov, 1990). Indeed, many researchers share Paris and Turner’s (1994) assertion that “The essence of motivated action is the ability to choose among alternative courses of action, or at least, to choose to expend varying degrees of effort for a particular purpose” (p. 222).

The claim that autonomy is at the core of the motivation to learn is also central to Deci and Ryan’s (1985) influential “self-determination” theory. According to Deci and Ryan, the need for autonomy is an innate human need, referring to the desire to be self-initiating and self-regulating of one’s actions. Therefore self-determination, that is, engaging in an activity “with a full sense of wanting, choosing, and personal endorsement” (Deci, 1992, p. 44), is a prerequisite for any behavior to be intrinsically rewarding. CL provides a learning environment that fully supports self-determination on the part of the students. The following summary of the educational relevance of self-determination by Deci, Vallenard, Pelletrier, and Ryan (1991) applies almost literally to CL:

The specific supports for self-determination we suggest include offering choice, minimizing controls, acknowledging feelings and making available information that is needed for decision making and for performing the target task. With a general attitude of valuing children’s autonomy and by providing the type of autonomy support just mentioned, we stand the greatest chance of bringing about the types of educational contexts that facilitate conceptual understanding, flexible problem solving, personal adjustment, and social responsibility. (p. 342)

Learner autonomy has been shown to exert a significant positive impact on motivation in L2 contexts as well. In her extensive discussion of learner autonomy and L2 motivation, Ushioda (1996) concludes that autonomy and motivation go hand in hand: “Autonomous language learners are by definition motivated learners” (p. 2). In another recent study, Dickinson (1995) also makes the initial assumption that an active, independent attitude to learning and personal involvement in decision making leads to increased L2 motivation. Dickinson’s review of relevant motivational studies confirms this view:

It has been shown that there is substantial evidence from cognitive motivational studies that learning success and enhanced motivation is conditional on learners taking responsibility for their own learning, being able to control their own learning and perceiving that their learning successes and failures are to be attributed to their own efforts and strategies rather than to factors outside their control. Each of these conditions is a characteristic of learner autonomy as it is described in applied linguistics. (pp. 173–174)

Course-Specific Motives

The CL process has been found to increase three of the four components associated with course-specific motivation in Dörnyei’s (1994) construct: intrinsic interest, expectancy, and satisfaction. The increased student interest in the learning process stems from several sources, many of which have been discussed earlier: more varied and dynamic tasks, greater task involvement, the pleasure of working in a cohesive group, the self-determined nature of learning, and the informational feedback received from the peers. The expectancy of successful task fulfilment is enhanced by the group serving as a “resource pool that is greater in any given area than the resources possessed by any single member” (Douglas, 1983, p. 189)—that is, students know that they can count on their peers when in trouble. The satisfaction that students experience after they complete a task successfully is increased by the shared experience and the joint celebration. This has been confirmed by Van Oostrum and Rabbie’s (1995) experiment, in which cooperative groups reported higher satisfaction about their obtained results and performance than learners in competitively structured classes. In addition, Szostek (1994) has found in a L2 context that a great deal of the satisfaction group members feel comes from the success of coaching, teaching, drilling, and helping each other to learn.

Motivational Processes at the Learner Level: Self-Confidence

Almost every report on the outcomes of CL highlights some kind of improvement in the learners’ self-esteem, self-efficacy, and confidence, often as the result of changes in the learners’ attributional system or a decrease in the language
anxiety they experience. Following Clément (1980; Clément & Kruidenier, 1985; Labrie & Clément, 1986; Clément et al., 1994), these factors have been subsumed under a broad motivational process, linguistic self-confidence, in Dörnyei's (1994) model.

According to Covington's self-worth theory of achievement motivation (Covington & Roberts, 1994), the highest human priority is the need for self-acceptance and therefore "in reality, the dynamics of school achievement largely reflect attempts to aggrandize and protect self-perceptions of ability" (p. 161). A primary feature of CL is that it avoids any social comparison of individuals and thus students do not equate their worth with the ability to achieve competitively. Rather, as Ames and Ames (1984) argue, the student's willingness to put forth effort serves as a primary criterion in the evaluation of behavior. The absence of the detrimental effects of social comparison, accompanied by the increased peer acceptance and support that exists in cohesive groups, is expected to result in higher perception of ability, self-worth, and academic self-esteem (i.e., self-efficacy) in CL groups than in traditional classes. This was demonstrated by Johnson, Johnson, and Taylor's (1993) and Nichols and Miller's (1994) empirical studies.

Enhanced self-confidence in cooperatively structured classrooms is also a function of the attributional focus of such environments. The guiding principle in the attribution theory of motivation is that people search for understanding, asking "why" questions to explain their past successes and failures. These explanations, in turn, play a central role in the determination of future achievement. Failure that is ascribed to stable and uncontrollable factors such as low ability decreases the expectation of future success more than failure that is ascribed to controllable factors such as effort (Weiner, 1979). Ames and Ames (1984) argue that whereas in a competitive classroom structure the focus is on ability, in a cooperative setting the attributional focus is on effort and intent. This enhances achievement behavior through the learners' increased self-confidence.

A final reason for increased self-confidence is the fact that cooperation typically generates less anxiety and stress than other learning formats (Deci & Ryan, 1985). This is partly caused by the positive emotional tone that characterizes CL and partly by the increased level of self-determination. In addition, Johnson et al. (1995) point out that cooperation also produces more effective coping strategies to deal with anxiety than does competition.

A Summary of Motivation in Cooperative Language Learning

The overview of the motivational basis of cooperative language learning presented above helps us understand the consistently favorable affective impact of CL on L2-related attitudes and motivation. This positive influence was the central theme of the first L2 study on CL (Gunderson & Johnson, 1980), in which the authors concluded:

Perhaps the most basic instructional objective in a foreign language class is to send students away with at least as favorable an attitude toward learning the language as they had when they first arrived in the classroom. Certainly, students who finish one foreign language course should wish to take the second. While competitive and individualistic learning do have their place, the use of cooperative learning groups is an important teaching strategy for promoting positive attitudes toward learning a foreign language. (p. 43)

As argued earlier, the consistency of improved student attitudes and motivation observed in CL contexts suggests that the CL process generates a specific motivational system that energizes learning. In Table 1 the components activated by this system are marked with an asterisk. The unmarked components are not necessarily irrelevant, but they are not assumed to be enhanced by CL in particular; for example, learners in a CL class may or may not be instrumentally motivated. The number of different motivational aspects which CL significantly affects explains the remarkable results obtained in a major study on the role of motivation in CL by Sharan and Shaulov (1990), who found that more than half of the variance in achievement in three academic subjects was caused by the "motivation to learn" factor. Such a substantial impact is very rare in motivation studies in general and is due to the fact that the motivational system promoted within cooperative situations (a) mediates between achievement and several significant independent variables related to the unique social structure of the CL classroom, and (b) considerably enhances the learners' achievement-related self-concept. Thus, we may conclude that from a motivational point of view CL is undoubtedly one of the most efficient instructional methods.

CONCLUSION

As stated earlier, the strength of CL lies in the small group learning format accompanied by positive interdependence among the learners, resulting in intensive interaction and a process of
cooperation. CL, in fact, can be seen as the learning process which best maximizes the beneficial effects of peer collaboration. By emphasizing the students’ active participation in constructing their own knowledge, CL signifies a major departure from traditional educational contexts where “instruction is still largely viewed as a vast delivery service whose task is to deliver a completed manufactured product to the consumer” (Sharan & Shaulov, 1990, p. 196). Indeed, CL can also be viewed as an instructional approach that fully realizes the principles of an emerging student-centered teaching paradigm (Johnson et al., 1995).

This article examined the psychological foundations of the success of cooperatively structured learning. Two interrelated processes, the group dynamics of CL classes and the motivational system generated by peer collaboration, were discussed. It was argued that CL tends to produce a group structure (including peer relationships and learning norms) and a motivational basis that provide excellent conditions for L2 learning. In a CL class we would see motivated students engaged in varied interactions while working intensively towards completing group tasks—features that are considered crucial for efficient communicative L2 classes. Indeed, Coelho (1992) draws attention to the striking similarities between cooperative group skills emphasized by CL and L2 functions emphasized by communicative language teaching and argues that CL can provide the foundation for communicative language curriculum design.

Finally, I emphasize that although the discussion in this article focused entirely on cooperatively structured learning, the processes described are not restricted to CL but are also characteristic of any student collaboration, group work, or team work in general, as CL is only viewed as the learning format which maximizes student collaboration. Therefore, an understanding of the “deep structure” of CL can help us understand some of the fundamental processes and concepts underlying modern language teaching methodology.

REFERENCES


NOTES

1 In this article I follow the use of the term “group dynamics” as established in social psychology and include the entire language class under “group.” Therefore, “group dynamics” in this paper concerns not only small group work within the class but also whole classroom dynamics.

2 Group dynamics is a relatively young field in the social sciences, overlapping with disciplines such as social, industrial, organizational and clinical psychology, psychiatry, anthropology, sociology, and social work, since all these fields involve groups as focal points around which human relationships are organized.


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