PART I: COOPERATIVE LEARNING AND SECOND LANGUAGE CLASSROOMS

Introduction

Purpose of this book

If we had to choose one word to symbolize the changes in second language teaching over the years, it would be *communicative*: the idea that the surest path to engagement in learning a second language lies in students – even beginners – communicating in that language. Indeed, if asked to describe their teaching methodology, many teachers today would say they use communicative language teaching (Richards & Rodgers 2001). Group activities (pairs are included herein) have become one of the key tools in communicative language teachers' toolboxes because groups provide so many opportunities for students to communicate and because groups provide a means of integrating listening, speaking, reading, and writing (Crookall & Thiyaragarajali 1997; Harmer 1998; Jacobs 1997). However, despite the many advantages of group activities, problems also arise – problems that have led some teachers to give up on using group work. These problems include members not participating, groups not getting along, or learners unable to do the task.

Cooperative learning arose in mainstream education as an effort to address such problems and to generally facilitate student-student interaction. As is the case elsewhere in education, definitions vary. Johnson, Johnson, and Holubec, leaders of cooperative learning since the 1970s, offer the following definition: "Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning" (1993: 9). If we are to maximize the benefits of groups, we need to understand the complexities that are involved in collaborative interactions. In this book, we aim to convey to pre- and inservice language teachers what the chapter authors and we (the editors) have learned collectively from our many years of using cooperative learning with students.

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Contents of the book

The first part of this book lays out the theoretical, historical, and research foundations of cooperative learning, and the second part provides illustrations of the application of those elements as part of teachers' professional practice. As such, this volume is meant for teachers who are actively searching for means to implement philosophies that put learners at the center of the learning process. Moreover, it aims to facilitate the many decisions teachers need to make in attempting to maximize the great potential of group activities. Specifically, in the first part of this book, we discuss some of the work in general education that supports the use of cooperative learning, make evident its connections to second language teaching and learning, and provide a framework for making choices about the use of cooperative learning.

The second part of the book, in our opinion, is the most exciting. It consists of six classroom narratives illustrating how second language teachers have implemented cooperative learning in second language classrooms around the world, across primary, secondary, and postsecondary educational levels. Each of these chapters ends with a section entitled *Discussion Points and Tasks*, which is an opportunity for the reader to analyze how each author has implemented cooperative learning in a particular setting, and then to apply the ideas in the chapter to your own teaching situation.

What is cooperative learning?

Although a more extensive treatment of the characteristics of cooperative learning will be provided in Chapters 1–3, the key point is that not all group work constitutes cooperative learning. Instead, cooperative learning represents the product of ongoing investigation based on theory, research, and practice as to how to maximize the benefits of student-student interaction. The introduction of student-student interaction into the classroom initially may make teaching more difficult, because, if teachers just put students in groups and ask them to work together without considering these factors, the chances of fruitful interaction diminish.

Two crucial concepts in almost everyone's definition of cooperative learning relate to the amount of group support and to the degree to which each individual member of the group needs to learn and to exhibit his or her accomplishments. The first of these crucial concepts is *positive interdependence*, the perception among group members that what helps one group member helps all group members, and what hurts one group member hurts

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all (Deutsch 1949; 1962). Positive interdependence encourages cooperation and a feeling of support.

The second crucial element is *individual accountability*. Slavin (1987: 5) defines individual accountability as being present when "[T]he team's success depends on the individual learning of all team members." To accomplish this, groups encourage all members to participate and to meaningfully demonstrate their knowledge and skills. By doing so, individual members add to the overall knowledge of the group, reveal areas of weakness that group mates can attend to, and develop a common sense of what the goals and subgoals are both for the group and for individual members and how they can be reached. An example of a group activity that does *not* encourage individual accountability would be an assignment for the group to work together to write one composition for the whole group. In this situation, the best writer in the group might do all the writing, while the other members are off task.¹

Individual accountability does overlap with positive interdependence. However, the two outlooks will not always exist together. For instance, using the example in which primary and/or secondary students work in a group to write one composition, they may feel positively interdependent with one another (for example, if they all want their composition to achieve its communicative purpose). But such an activity might do little to encourage all the group members to feel that they need to participate and learn. On the other hand, if students are sitting in a group and each is to write a composition with no mechanism for providing each other with feedback or other types of assistance, they would be more likely to feel individually accountable but would not feel positively interdependent with their fellow group members.

One more point should be covered in this brief definition of cooperative learning. For some educators, it is synonymous with *collaborative learning* (e.g., Romney 1997). Romney sees *cooperative learning* as the term used in primary and secondary education, with *collaborative learning* used for joint learning efforts among older students. On the other hand, Chung (1991) sees *collaborative learning* as an umbrella term that includes cooperative learning techniques make the learning environment too structured and thus artificial, depend too much on extrinsic motivation, and focus on lower-order

¹ At the university level, having one student do all of the writing may lead to productive collaborations because, unlike primary or secondary students, university students may be able to take on the needed sense of individual responsibility without difficulty.

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thinking tasks, thus robbing students of initiative and of opportunities to exercise higher-order thinking skills (Matthews et al., retrieved 1/31/99). In an address to the 1994 conference of the International Association for the Study of Cooperation in Education, Kenneth Bruffee stated his belief that cooperative learning was beneficial for students at primary and secondary school levels, but that collaborative learning was the better option for older students. Indeed, Bruffee, who works in the area of writing pedagogy at the university level, is associated with collaborative learning (Bruffee 1993). In a discussion at the same conference, Yael Sharan suggested that there exists a wide range of options in terms of teacher influence of student-student interaction, and that the cooperative learning technique called Group Investigation (Sharan & Sharan 1992) allows students a great deal of control over such matters as selection of topic, group mates, and collaboration procedures. We agree with Sharan's broad interpretation. Thus, in this book the term *cooperative learning* should be understood as including collaborative learning.

Cooperative learning has a strong foundation in research. Many hundreds of studies across a wide range of subject areas and age groups have been conducted (for reviews, see Cohen 1994b; Johnson & Johnson 1989; Johnson et al. 2000; Sharan 1980; Slavin 1995). These studies suggest that when compared to other instructional approaches, cooperative learning activities are associated with gains in achievement, higher-level thinking, self-esteem, and interethnic relations. Students in cooperative learning settings tend to like the subject matter and their school more. Indeed, Johnson (1997) claims that cooperative learning is one of the best-researched approaches in education, and that when the public asks educators what we know that works in education, cooperative learning is one of our surest answers. In an earlier interview (Brandt 1987: 12), Johnson stated:

If there's any one educational technique that has firm empirical support, it's cooperative learning. The research in this area is the oldest research tradition in American social psychology. The first study was done in 1897; we've had ninety years of research, hundreds of studies. There is probably more evidence validating the use of cooperative learning than there is for any other aspect of education.

Although cooperative learning is thought of as being predominantly founded in American social psychology and used on American grounds, the narrative chapters included in the second part of this book take this approach to an international realm. Only two of these chapters take place in the United States, and in both of these courses the students are nonnative speakers of English. We believe that broadening the scope of cooperative

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learning, by taking into consideration some cultural dimensions in its application, is one of the major contributions of this book.

Cooperative learning derives inspiration from many areas of educational endeavor, some of which might seem to contradict one another. In the first chapter, we discuss its roots in general education. In Chapter 2, we discuss its application to second language teaching and learning, and in Chapter 3, we examine issues that arise in implementing cooperative learning.

Six narratives about teachers using cooperative learning

To find contributions for the second section of this book, we looked for teachers who had a good grasp of what cooperative learning is about, and who had had experience using it in a variety of countries and situations. We wanted – and believe we have found – teachers who offered unique perspectives, yet who, at the same time, were united in a common effort to advance language learning via group activities. We asked these teachers to write about their experiences in a narrative form. This style is different from what is usually encountered in books about language education, but we believe that this style provides important insights into the thinking involved as the authors made decisions about how best to implement cooperative learning in their complex and constantly changing classrooms. The narratives presented in Chapters 4 through 9 are not intended to provide cooperative learning recipes. Rather, the purpose is to provide insight into key concepts of cooperative learning as contextualized and to illustrate the great range of possibilities that exist in using it for language teaching.

Suggestions for using this book

We believe this book is useful to a wide range of language teachers. It serves as a useful companion to an earlier book in this series (Johnson 1995), which dealt with the broader issue of communication in second language classrooms. Those with little experience with cooperative learning will find this book an introduction grounded in the experience of specific classrooms, while those with more experience will find fresh ideas in the experiences of their fellow teachers.

We hope you will put into practice the ideas for implementing cooperative learning that the narratives spark in your mind. As you read, imagine that you and the chapter authors have formed a group to discuss the use of

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cooperative learning in second language teaching. How do the authors' experiences relate to yours and those of your colleagues? What advice might the authors give about using cooperative learning in your context? We trust that generating and discussing answers to those questions will prove to be an enjoyable, thought-provoking experience.

1 Roots of cooperative learning in general education

George M. Jacobs, Steven G. McCafferty, and Ana Christina DaSilva Iddings

As we proceed with our discussion about cooperative learning, we must take a moment to present a basic overview about four foundational psychological theories. In so doing, our purpose is to acquaint the reader with aspects of theory and research that may be helpful in understanding the historical development of the cooperative learning approach and its significance to the teaching of a second language.

Social psychology

Alport (1954) worked on the goal of facilitating effective group dynamics. His investigations of how best to help people from different racial groups come to live together more harmoniously led him to derive three conditions that he believed essential for interaction to result in greater harmony and more productive relations: 1) interactors must be of equal status, 2) they must have common goals, and 3) their collaboration should be officially sanctioned.

In the 1970s, Aronson and his colleagues (Aronson, Blaney, Stephan, Sikes & Snapp 1978) applied these three conditions to the classroom and created the well-known cooperative learning technique, Jigsaw. They were working at the time to improve racial relations among students in recently integrated schools in the southwestern United States. In Jigsaw, each member of the group has unique information (helping to promote equal status) that they must share with group mates in order for the group to achieve its common goal. This collaboration, of course, takes place with the teacher's official sanction.

Jigsaw, which is appropriate to any subject area, has been used in second language teaching using print (e.g., Coelho, Winer & Winn-Bell Olsen 1989; Geddes 1981; Johnson 1981) and spoken texts (Harmer 1998). Furthermore, the concept of providing each group member with unique information that must be combined has long been popular in second language teaching. Spotthe-Difference tasks (Morgan Bowen 1982) and Strip Stories (Gibson 1975)

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are just two examples. In the literature on second language tasks (e.g., Pica, Kanagy & Falodun 1993; Platt & Brooks 1994), the terms *information gap* and *required information exchange* have been used to describe tasks like Jigsaw, in which group members are each given unique information.

While Alport's original three conditions are very useful to consider, it is also important to note that since 1954 there have been developments in our understanding of each. For example, it is highly unlikely that any two students are really of equal status in any real sense; that is, how they are treated by other class members – both by individuals and groups within the class as well as by the teacher – is bound to differ despite being in the same classroom and following the same behavioral guidelines. This same point of view holds with regard to the notion of common goals. Indeed, how goals and subgoals are formed and how they change in relation to working with particular people in particular circumstances has become a primary area of focus within the study of classroom interactions (for example, see Engestrom et al. 1999 and McCafferty et al. 2001). Finally, the role of the teacher as a sanctioner of activities, attitudes, and so on, has changed considerably; teachers have become more "facilitators" than "ship's captains," the prevalent model in the United States in the 1950s.

Subsequently, Johnson and Johnson (1994b) developed many applications of the concept of *interdependence* to education. They believed that too many instructional practices, for instance, teacher-fronted pedagogy and norm-referenced assessment, encouraged students to feel negatively interdependent with their classmates. The Johnsons' goal was to find ways to increase the feeling of positive interdependence within learning groups. A whole approach to cooperative learning, known as Learning Together, has developed from their work.

Developmental psychology

Although throughout history there have been many prominent thinkers and researchers who have diligently studied human cognition as it unfolds in the course of a lifetime, we have chosen to turn our focus to two of the most notable developmental psychologists of the twentieth century: Jean Piaget and Lev S. Vygotsky.

Piaget contends that each person constructs his or her own personal understanding of the world around them through a search for equilibration (i.e., a match between current *schemas* – background information – about the world and how it works, on the one hand, and what is experienced, on the other). Piaget's ideas have been widely interpreted as supporting the

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creation of classroom environments in which students play active roles as they engage in real or at least realistic tasks (Slavin 1995). Scholars working in the Piagetian tradition emphasize the value of social contexts for arousing productive cognitive conflicts (Doise & Mugny 1984). For instance, Murray (1982) found that two students – neither of whom was able to do a particular task alone – were able to learn to complete the task when working together.

Piaget's epistemological views about psychological development assume that the growth of consciousness progresses through preordained, irreversible levels (i.e., what happens at a later stage of development is enabled by what happened at previous stages). Thus, according to this theory, every child must go through the same structure of cognitive development in a fixed sequence, the stages of which are distinctively graduated.

In this regard, Piaget and Vygotsky greatly differ. Because Piaget considered development to be a precoded aspect of our biology, the attempt to accelerate development through learning with the help of teachers or others is highly restricted: Essentially, learning cannot precede development. For Vygotsky, on the other hand, a child is at once surrounded by sociocultural contexts that exert an immediate influence on development through interaction: In other words, learning leads development. For example, through play children dress up as adults, pretending to speak and act like those they will become. In such circumstances, Vygotsky argued that "a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself" (1978: 102).

Moreover, Vygotsky stressed that *semiotic mediation* (i.e., the use of signs and symbols – principally language – deriving from the sociocultural milieu that help us to understand our world) becomes the primary vehicle for human cognitive growth. He (1981: 163) explained:

Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category.

Thus, for Vygotsky, there is a very definite role to be played by actively directed learning, both in the cognitive development of individual human beings and in the history of human culture. Vygotsky called the theoretical construct that enables this process the *zone of proximal development*.

The zone of proximal development (ZPD)

As previously stated, the ZPD is a key concept for Vygotskian theory in that it distinguishes between what a child can do on her or his own cognitively,