of profanity are still with us. Then during the Renaissance we borrowed all kinds of words from Latin and Greek. In fact, there are more words from Latin and Greek in the English vocabulary today than there are from Anglo-Saxon. It stands to reason that if one learns the most commonly used Latin and Greek prefixes and roots in English his vocabulary is going to increase. What Dr. Brown did, some years ago, was to identify the most frequently used Latin and Greek elements in English — thirty-four of them. By combining these thirty-four elements, he devised fourteen master words, some of them having two elements, some three. For example, Master Word No. 6 is **monograph**, consisting of a prefix, **mono** (meaning **one** or **alone**), and a root, **graph** (meaning **to write**). Thus, **monogamy** means marriage with one, while **graphology** is the study of handwriting. We encourage our students to look for the Master Word elements in their experiences with words.

Another method is to learn a new word everyday. Dr. Brown still makes it a habit to acquire a new word daily. Sometime ago, while looking through the dictionary, I came across a word I had never seen before: **estivate.** It is an agricultural term, I think. To estivate means to lie dormant throughout the summer. In the days that

followed, I asked my colleagues if they were familiar with the word. None of them were. Then one day I saw Jim Brown in the hall and asked him the same question. "To estivate," he said, "means to lie dormant throughout the summer."

To know the words, then, is to have the potential for using them well—to communicate effectively. Knowing the words, however, does not **assure** that one will use them well. There are people with good vocabularies, I think, who have not learned to write and speak with grace or distinction. Some time ago, I mentioned the word **fortuitous** in class and explained what it meant. In his next paper, a young man used the word — but used it in an entirely ineffective and inappropriate way. He had learned the term, but was not yet sensitive to its proper use. That sensitivity can be acquired only by reading.

I would say that good communication begins with exactness and ends with grace. Exactness is knowing the words. Grace is using them in effective combinations. And I'll tell you what comes in between. **Honesty. Economy. Vigor.**

If we speak and write with these five qualities in mind, if we develop and refine them by reading and writing, we will communicate effectively — and give hope for the future.

PROFESSIONAL DEVELOPMENT

NACTA Conference Sessions
Learning Together and Alone: Cooperation, Competition, and Individualization

Karl Smith

Whether it is in preschool, elementary or secondary school, or college learning situations, there are three important types of interaction: the interaction between the teacher and the students, the interaction between the students and the curriculum materials, and the interaction among students. Both the teacher's role and the curriculum have received a great deal of attention in instructional theory, but the student-student interaction patterns have largely been ignored and often mismanaged by educators.

Teachers can structure student learning goals so that students are in the same boat together trying to help each other learn, are in a win-lose struggle to see who is superior and who is inferior, or are all facing the learning situation alone. By structuring student learning goals cooperatively, competitively, or individualistically, teachers

control whether students are positively interdependent, negatively interdependent, or independent of each other during instructional activities. Technically, cooperative learning is based on a positive correlation among goal attainments, competitive learning is based on a negative correlation among goal attainments, and individualistic learning is based on independent goal attainments (Johnson and Johnson, 1975). **The way in which teachers structure student learning goals determines how students interact with each other. Student interaction patterns are a major determinant of the cognitive and affective outcomes of instruction.** The first step during teaching is always setting the appropriate goal structure to maximize the achievement of instructional goals. Setting the appropriate goal structure for each lesson should become as automatic for teachers as turning the key to start a car.

In this introduction we summarize some of the major research finding on the relative effects of cooperative, competitive, and individualistic goal structures and discuss specific procedures teachers can use in establishing cooperative learning stiuations. Keep in mind that while we emphasize the use of cooperatively structured

learning because of its importance and underutilization in the past, all three goal structures can be used appropriately and effectively. Teachers are well-advised to use all three goal structures and to instruct students in the basic skills necessary to function in all three types of situations. The importance and utility of the cooperatively structured learning does not mean that competitive and individualistic instruction should never be used.

Interaction Patterns And Outcomes

A great deal of research indicates that the appropriate use of cooperative, competitive, and individualistic goal structures is not only an important instructional strategy, it may be the most powerful in terms of affecting both cognitive and affective learning outcomes. Ignoring this research (and their common sense) teacher educators have often misinformed and poorly prepared teachers to use all three goal structures in systematic and appropriate ways. In our book for teachers (Johnson and Johnson, 1975) and in a previous journal article (Johnson and Johnson, 1974) we reviewed more than 350 studies on the effects of cooperative, competitive, and individualistic goal structures. We now have collected over 600 studies that demonstrate that with any curriculum, with any age of student (from preschool through graduate school), and in any subject area, appropriately structuring learning goals is an extremely powerful teaching strategy and has significant effects on a broad range of learning outcomes. Without a doubt most classroom learning should be structured cooperatively. Some of the major research findings are (Johnson and Johnson, 1974, 1975; Johnson, 1979):

1. The successful mastery, retention, and transfer of concepts, rules, and principles is higher in cooperatively structured learning than in competitively or individualistically structured learning. For the day to day conceptual and problem-solving learning, cooperation promotes higher quality and more quantity of learning. This is especially true for students of average and low ability, although the learning of gifted students is in no way lessened by spending much of their time learning in heterogeneous cooperative learning groups.
2. Student motivation to learn will be higher, more intrinsically-oriented, and less extrinsically-oriented in cooperative learning situations than in competitive or individualistic ones.
3. The cognitive and social development of students is more facilitated by cooperative than by competitive or individualistic learning experiences. The ability to take other people's perspectives, to communicate effectively, to resolve conflicts, and to relate effectively are all encouraged more by cooperative than by competitive or individualistic experiences.
4. Student attitudes toward teachers, other school personnel (principals, teacher aides, counselors), subject areas, and school are more positive in cooperative

compared with competitive and individualistic learning experiences. Not only do students who are learning cooperatively like teachers better, they feel more accepted personally and supported academically by teachers.
5. Students like their classmates more in cooperative than in competitive or individualistic learning situations, including classmates from different ethnic groups, the opposite sex, different social classes, and classmates who are intellectually and physically handicapped. Students in cooperative learning situations, furthermore, feel more supported and accepted by their classmates than do students learning competitively or individualistically.
6. Student self-esteem and psychological health will generally be more positive in cooperative than in competitive and individualistic learning situations.

These research findings, along with other equally powerful and important findings reported in Johnson and Johnson (1975) and Johnson (1979), all indicate the importance of cooperative learning experiences for both cognitive and affective instructional outcomes. Yet the procedures for structuring learning situations cooperatively are not well known by teachers. One of the purposes of this handbook is to illustrate such procedures. For a more complete discussion, see Johnson and Johnson (1975).

Structuring Cooperative Learning

In our work with teachers in many parts of the country we have observed teachers who believe that they are implementing cooperation when in fact they are missing its essence. Cooperation is **not** having students sit side by side at the same table. Cooperation is **not** having students discuss an assignment before each has to do it individually. Cooperation is **not** having students do a task individually with instructions that the ones who finish first are to help the slower students. Cooperation is **not** having students share materials before a competitive test. Cooperation is **much more** than being physically near other students, discussing material with other students, helping other students, or sharing materials with other students, although each of these is important in cooperative learning.

The essence of cooperative learning is assigning a **group goal** such as producing a single product (e.g., a single set of answers to math problems or a single theme or report) or achieving as high a group average on a test as possible, and rewarding the entire group on the basis of the quality or quantity of their product according to a fixed set of standards. The teacher establishes a group goal and a criteria-referenced evaluation system, and rewards group members on the basis of their group performance. Teaching a cooperative lesson, however, involves more than just setting up a cooperative goal structure. Here is a brief summary of the teacher's role in cooperatively structured learning:

1. As far as possible, specify the instructional objectives.
2. Select the group size most appropriate for the lesson. With young students the size of the group may need to be two or three members. With older students larger groups are possible. The optimal size of a cooperative group will vary according to the resources needed to complete the lesson or project (the larger the group the greater the resources available), the cooperative skills of group members (the less skillful the group members, the smaller the group should be), and the nature of the task.
3. Assign students to groups. Usually, teachers will wish to maximize the heterogeneity in the group. Random assignment usually ensures a good mixture of males and females, highly verbal and passive students, leaders and followers, and enthusiastic and reluctant learners. And sometimes teachers may wish to group students around their interests. Often teachers may wish to assign students to groups so that students high, low, and average in expertise are in the same group.
4. Arrange the classroom. Teachers will wish to cluster the groups of students so that they will not interfer with each other's learning. Within the groups students should be able to see the relevant materials, converse with each other, and exchange materials and ideas. Usually a circle is best, and long tables should be avoided.
5. Provide the appropriate materials. When students are first learning how to cooperate, or when some students are having problems in contributing to the group's work, teachers may wish to arrange the materials like a jig-saw puzzle and give each group member one piece. A group, for example, could be writing a report on Abe Lincoln, with each member having material on a different part of his life. In order for the report to be completed, all group members will have to contribute their material and ensure it is incorporated into the group's report.
6. Explain the task and the cooperative goal structure. The task may be the successful completion of an assignment in math, science, language arts, or social studies. To explain the cooperative goal structure teachers will need to communicate that there is a group goal, a criteria-referenced evaluation system, and all group members will be rewarded on the basis of the quality of the group's work.
7. Observe the student-student interaction. Just because the teacher asks students to cooperate with each other does not mean they will always do so. Much of the teacher's time in cooperative learning situations is spent observing student groups to see what problems they are having in functioning cooperatively. For specific procedures for observing, and for specific observation instructions, see Johnson and and R. Johnson (1975) and Johnson and F. Johnson (1975).
8. Intervene as a consultant to help the group solve its problems in working together effectively and to help group members learn the interpersonal and group skills necessary for cooperating. These skills are detailed in Johnson (1972, 1978) and in Johnson and F. Johnson (1975), along with activities to be used in teaching the skills.
9. Evaluate the group products, using a criteria-referenced evaluation system. The procedures for setting up and using such an evaluation system are given in Johnson and R. Johnson (1975).

Barriers Against

There are classroom pressures that mitigate against the use of cooperatively structured learning. One is the inadequency of students' cooperative skills. Many students have never learned how to cooperate with others and must be taught to do so. Thus the first experience of teachers who try structuring cooperative learning is that their students cannot work together. Teaching cooperative skills becomes an important prerequisite for academic learning, not just something to be thrown in when there is spare time.

A second pressure against the use of cooperatively structured learning is the competitive myths held by many parents and educators. These myths are based on the social Darwinian view that we live in a survival of the fittest world dominated by the law of fang and claw. Despite popular belief, society is not competitive, motivation is not based on competition, competitive and individualistic experiences do not build character and strong identities, and self-esteem is not increased either by competing or working alone.

A third barrier to the use of cooperatively structured learning is the pressure for covering a specified amount of curriculum material within a certain time period. Under the pressure for cognitive accountability that recognizes only what page a student is on by Christmas it seems difficult to many teachers to take the time necessary to teach cooperative skills so that students can learn cooperatively. As has long been evident from the social psychological research on productivity (Watson and Johnson, 1972), it is precisely the students who take time to learn cooperative skills and who stop to resolve difficulties in working together, who will achieve the most in the long run. Stopping to teach cooperative skills in September does mean that students will master more material by Christmas.

Back To Basics

The importance of cooperative learning experiences goes beyond improving instruction, increasing student achievement, and making life easier and more productive for teachers, although these are worthwhile activities. Cooperation is as basic to humans as the air we breath. The ability of all students to cooperate with other people is the keystone to building and maintaining stable families, career success, neighborhood and community membership, important values and beliefs, friendships, and con-

tributions to society. **Knowledge and skills are of no use if the student cannot apply them in cooperative interaction with other people.** It does no good to train an engineer, secretary, accountant, teacher, or mechanic, if the person does not have the cooperative skills needed to apply the knowledge and technical skills in cooperative relationships on the job, in the family and community, and with friends. The most logical way to emphasize the use of cooperative skills in task situations is to structure the majority of academic learning situations cooperatively. Students can then learn technical knowledge and skills in a realistic setting of having to work cooperatively with their classmates. **There is nothing more basic than learning to use one's knowledge in cooperative interaction with other people.**

Concluding Note

Effective teaching requires structuring learning cooperatively the majority of the time. Yet there is an important place for competitive and individualistic goal structures within the classroom. The major problems with competition and individualistic efforts result from their being inappropriately and over used. In addition to cooperative skills, students need to learn how to compete for fun and enjoyment, win or lose, and how to work independently and follow through on a task until it is completed. The natural place for competitive and individualistic efforts is within the umbrella of cooperation. The predominant use of cooperation reduces the anxiety and evaluation apprehension associated with competition and allows for the use of individualistically structured learning activities as part of a division of labor within cooperative tasks. The relative importance of cooperative, competitive, and individualistic goal structures and their relationship to one another can be summarized in one statement: **Cooperation is the forest, competition and individualistic efforts are the trees.**

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How To Speak Without Words: Techniques for Effective Communication

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Today I want to do some exciting things for you. I want to help you learn more from others, become better informed and more sophisticated, and be liked and respected by all who talk to you. I also want to help you become more dependable, spare your many embarrassments, and enable you to meet the needs of other people. You may wonder how one person can give you all these benefits in a two-hour seminar when you have been seeking to achieve them for the past twenty or more years! Yet, I guarantee that if you listen to, and conscientiously apply the information which I share with you today, you will improve tremendously in these areas of human interaction. How can I possibly give all of these tremendous benefits to you? I plan to discuss nonverbal communication. I will explore briefly some background literature on nonverbal communication to develop a theory base from which to evaluate and understand some suggestions for improving your nonberbal communication. Then I will make some specific suggestions for use in your classroom, office space, and personal listening behavior. I must caution that the research in this field is voluminous. I will focus on only a limited number of areas and present a somewhat oversimplified view of the available information. I trust you will seek further information in areas not clearly explained or in which you develop an interest as a result of our time together.

The scope and importance of nonverbal communications must be established before we begin an in-depth discussion of some applications. Nonverbal communication as I present it includes a broad range of signals including the gestures person makes, the movements of various parts of the body, body posture, muscle tone, voice tone, voice timbre and volume, physical attractiveness, clothing, the physical elements of a room as well as all of the previous cultural, social, emotional, and biological factors which have predisposed an individual to perform and react to various nonverbal cues. Nonverbal signals are particularly good at revealing the emotional base of any typical human interaction, since many messages are difficult to convey adequately only with words. Anyone who doubts the truth of this statement may wish to write a love letter which totally expresses his personal feelings for a loved one. Also nonverbal communication is an integral part of our nature from the womb, and therefore is actually the first form of communication we possess (Davis, 1973). Evidence shows some behaviors are innate, such as the smile, the laugh, crying behaviors, stamping one's foot in anger, eye fixation, and perhaps a variety of other activities (Eibl -