

**INSTITUTE
FOR
RESEARCH
IN
LEARNING
DISABILITIES** 
The University of Kansas
Lawrence, Kansas, 66045
Emphasis on Adolescents and Young Adults

AN APPROACH TO LEARNING STRATEGY
TRAINING FOR GROUPS OF SECONDARY
STUDENTS

Jean B. Schumaker & Frances L. Clark

Research Monograph No. 11

September, 1982

Abstract

The purpose of this article is to outline specific instructional procedures that can be used effectively to teach LD adolescents in small-group settings. Specifically, the article covers the following: a brief review of research on learning strategies conducted by the University of Kansas Institute for Research in Learning Disabilities, (KU-IRLD); a set of instructional procedures for teaching specific learning strategies to groups of LD adolescents; and a set of general principles for teaching learning strategies to groups of students.

As a result of the epidemiological research conducted by the KU-IRLD on learner characteristics and setting attributes, a learning strategies curriculum has been found to be effective with secondary students. This intervention approach, which stresses "how to learn" rather than the teaching of specific content, enables LD adolescents to acquire the skills (e.g., gaining information from error monitoring) which will enhance their ability to cope with the content requirements of the secondary curriculum. Since most LD students at the secondary level are served in a resource room together with 3-8 other students, the topic of small-group instruction is particularly relevant for this population.

By following the instructional procedures outlined in this article combined with an appropriate teaching style and behaviors, teachers can provide group instruction that is as powerful and effective as that provided on a one-to-one basis. Sound instruction according to the guidelines outlined in this article will greatly enhance LD adolescents' chances for school and post-school success.

Educational programs for children identified as learning disabled have evolved as major educational options at the elementary level during the past 10 years. As these students have progressed through programs provided for them in the elementary grades, it has become apparent that the impact of their learning disabilities has not been substantially altered. Consequently, they enter secondary schools still hampered by their disability (Alley & Deshler, 1979; Siegel, 1974).

The problems encountered by learning disabled (LD) students in secondary schools are often magnified by the complex set of curricular demands placed on students at this level. These demands are particularly taxing for LD students who are mainstreamed for the majority of the school day. Because of their poor reading, writing, listening, test-taking, and notetaking skills, learning disabled adolescents are particularly prone to falling behind their peers. Similarly, their skill deficits heighten the probability of behavior-related problems, such as acting out, absenteeism, or dropping out of school.

The purpose of this article is to delineate procedures for effectively teaching LD adolescents in small-group settings. Instruction of LD adolescents in small groups (3-8 students) is highly relevant pedagogically because of the student/teacher ratios found in most resource-room settings. The article is divided into three major sections: (a) a brief review of research conducted on learning strategies interventions by the University of Kansas Institute for Research in Learning Disabilities (IRLD); (b) a description of a set of instructional procedures for teaching specific learning strategies to LD adolescents in group settings; and (c) a description of general principles for teaching learning strategies to groups of students.

Review of Learning Strategies Research

As a result of the epidemiological research conducted by the KU-IRLD during the past four years (Deshler, Schumaker, Alley, Warner, & Clark, in press; Deshler, Warner, Schumaker, & Alley, 1982) on learner characteristics and setting attributes, a Learning Strategies Curriculum has been developed in an effort to address the unique problems of LD adolescents in secondary settings. The learning strategies approach (Alley & Deshler, 1979) is designed to teach students "how to learn" rather than teaching them specific content. This intervention approach was adopted because the demands of the secondary curriculum require the acquisition of skills (such as gaining information from textbooks, error monitoring, and paragraph organization) that enhance students' ability to cope with the heavy content requirements at this level.

The development of the Learning Strategies Curriculum has proceeded according to the following phases. First, an instructional methodology was specified for use in teaching all the strategies (Deshler, Alley, Warner, & Schumaker, 1981). In addition, the step-by-step procedures of each strategy were incorporated with teacher directions into teacher manuals to facilitate standardization of the intervention procedures. Finally, separate student materials appropriate for each strategy were also developed.

Table 1 shows the curriculum components that have been developed to date. Three strands (gaining information from written material, gaining information from audio-material, and expressing information in writing) structure the organization of the strategy modules. Each strategy package was designed to facilitate objective measurement of changes in student performance. For this purpose, pre- and posttests were included. For strategies aimed at reading tasks students were observed, and intermittent probes were

conducted to determine whether they were using the strategy. When a student had finished reading, verbal reports of information learned were collected from him/her or he/she was given a written test over the information. For the writing strategies and the listening/notetaking strategy, students' written products were collected and analyzed.

Next, multiple-baseline-across-subject designs were used to explore the internal validity of each intervention package. A study including six to eight students has been completed on each of the following strategies: Word Identification, Paraphrasing, Visual Imagery, Self-Questioning, Multipass (a strategy for attacking textbook chapters), Sentence Writing, Paragraph Organization, Error Monitoring, Listening and Notetaking (e.g., Schumaker, Deshler, Alley, Warner, Clark, & Nolan, 1982).

Only one of the students who have received individual instruction in specific strategies has been unable to (a) learn two strategies on which he received instruction or (b) show any improvement in performance. Another student, although mastering two reading strategies in reading-ability level material, was unable to perform the strategy in grade-level materials. Two additional students failed to reach criterion within the time allowed; nevertheless, they made marked gains in their notetaking skills. Otherwise, the vast majority of students have mastered the strategies and, in the case of reading strategies, have been able to generalize their use of strategy skills to grade-level materials. Gains from baseline performance to post-intervention levels have been marked. Likewise, change in student behavior occurred in all students immediately after implementation of an intervention. Given these results (reported in detail in research reports available through the University of Kansas IRLD) and a number of successful replications, we

are confident that the learning strategies packages produce positive changes in LD students. Furthermore, the students are able to generalize the newly mastered skills to grade-appropriate materials.

Small-group instruction. One major modification of the initial instructional packages was made as the result of data gathered from students and teachers during the initial phase of research. Thus, guidelines and procedures for teaching the strategies in small groups were developed for the purpose of bringing each individual in the group to mastery. The new guidelines and instructional packages were initially implemented in resource-room programs where small groups of students received instruction during the 1980-81 school year. This group instruction of learning strategies is continuing in several resource-room programs and regular classes across the nation. Of the 72 students who received group instruction in five different strategies during the 1980-81 school year, only two failed to achieve mastery. The results from the 1981-82 school year appeared to be just as successful. One teacher has successfully taught the Sentence Writing Strategy to a group of 17 high-school students. Both teachers and students have indicated satisfaction with the small-group instruction procedures; in fact, students in this program reported greater satisfaction than students in programs involving basic skill remediation and less student-teacher interaction (Schumaker, Deshler, Alley, & Warner, 1982).

Thus, small-group instruction of learning strategies appears to be a successful and viable way to approach the needs of LD adolescents and the demands of the secondary setting. The group training format was adopted for several reasons. First, group training is efficient from a classroom management point of view. Instead of one teacher meeting individually with each

student in the program and repeating the same lesson many times, the students can be divided into small groups and all of them can be taught in a class period. In addition, the inclusion of peers within the instructional milieu can be a very effective training tool. If a student sees other peers using a skill, he/she is more likely also to use the skill. Finally, the participation of many individuals creates opportunities for presenting examples from differing perspectives and backgrounds.

Instructional Methodology

The adoption of a group format led to certain modifications within the original instructional methodology (Deshler, Alley, Warner, & Schumaker, 1981). This methodology follows a sequence of instructional steps based on substantiated learning principles. Within each step, a specification was made as to how the instruction could be delivered to a group of students. General principles of delivery to groups were also specified for use throughout the instructional situation. As currently conceived, the group instruction is delivered using a sequence of teaching steps. Since none of the strategies can be taught in a single class period, a review step is used at the beginning of each group lesson. After a brief review, the teacher implements the next step in the specified sequence. The teacher behaviors found to be successful in reviewing previous work and implementing the instructional steps in a group format will be described below.

Step 1: Testing the Student's Current Approach to the Task

Whether or not this step can be handled in a group format depends on the test(s) required for a given strategy. Some of the tests must be individually administered because the teacher must observe the student's

approach to a task or listen to his/her verbal responses. Other tests which require the student to produce a permanent product (e.g., write a paragraph, take a written test) can be given to a group of students. In the latter case, the instructions can be given to the entire group, questions may be asked of particular students to check their understanding of the instructions, and the group can proceed individually to create their permanent products. As with any group test, care must be taken to insure that each individual's work is his/her own.

After an evaluation of test results, feedback should be delivered individually to each student; however, some general statements about the student's current performance or approach to the task can be directed to the group as a whole.

Review of Previous Steps

In the review which occurs at the beginning of each instructional session after introduction of the strategy (Step 2), the teacher should involve the students as much as possible in rehearsing or restating what they have learned previously about a given learning strategy. Thus, the teacher should ask them questions about the strategy, calling on particular students to answer particular questions. Questions, which should be quickly delivered, should cover all the material learned thus far about a strategy. For example, the teacher might ask the following questions in rapid-fire succession, allowing time for a student to answer each one: "What is the name of the strategy we are learning about, Steve?"; "How can this strategy help you, Sue?"; "In what class do you think you can apply this strategy, John?"; "What's the first thing you do when using this strategy, Peter?"; "What's the next thing you do, Kathy?"; etc. When a student answers correctly, the teacher should briefly

praise him/her by saying something like, "Good"; or "Right." When a student answers incorrectly, on the other hand, the teacher should quickly call on someone else (e.g., "Do you agree with that, Dave?"). After asking all the questions and receiving appropriate answers, the teacher moves on to one of the following teaching steps. Step 2:
Explanation/Description of the Strategy to Be Learned

In this step, the teacher describes the new skill to be learned. Since the students often do not understand what a strategy is, the initial description involves naming the strategy, defining terms, and describing what the strategy involves and when it is used. The teacher must take care that this step involves all the students and that the format does not become a teacher monologue. As a general rule, the teacher should not make more than three cognitive statements without offering an opportunity for student participation. Such opportunities can take the form of: checking the students' understanding of what the teacher has just said (e.g., "What does it mean to survey a chapter, Kelly?"); asking the students when they think they might use a given strategy (e.g., "In what classes do you have textbooks that you would survey, Bill?"); and asking the students to give reasons why they think a strategy will be useful (e.g., "Why do you think surveying a chapter is helpful, Warren?"). Asking good questions allows the teacher to cover much of the necessary material while maintaining a high level of student involvement. Such a level of student involvement is more likely to lead to student learning than is a low one. Thus, it is useful for the teacher to review the material before class and to think of questions which will elicit appropriate information from the students. In this manner, the teacher only provides information which is needed to introduce

the strategy and to build a foundation for the questions. In this step, the following components are covered by the teacher providing information and asking questions: a brief description or definition of the strategy; examples of situations where the strategy can be used; reasons for how or why the strategy will be helpful; and a description of strategy steps. To briefly describe the strategy, the teacher can provide information and use questions to check the students' understanding of the information. For the discussion of situations in which the strategy will be useful, the teacher can provide a general description of the characteristics of applicable situations (e.g., "You'd use Multipass in a class where you have a textbook which is divided into chapters and each chapter has subtitles and questions at the end"). The teacher can then ask the students to name specific classes to which these characteristics apply. For the discussion of reasons, the teacher can ask the students why they think a strategy or specific strategy steps will be useful or important. In discussing the strategy steps, the teacher should make use of the blackboard or overhead projector to list the skill steps and any other information provided on the cue cards which accompany the strategy packet. The teacher can ask the students what steps they think should be included in the strategy (e.g., "What part of a chapter should a person look at first to figure out what that chapter is about, Sara?") and then list them on the board. The questions should be specific and lead the students to come up with appropriate responses. Some steps can be contributed by the teacher. As each step is listed on the board the teacher may ask the students to check their understanding of the step and to elicit reasons for including a given step in the strategy.

Step 3: Modelling the Strategy

Here the teacher models the strategy by acting out all the necessary steps while "thinking" aloud so that students can witness all the processes involved in the strategy. In group instruction of this step, each student should have access to the materials the teacher is using. For example, each student should have the textbook the teacher is using to demonstrate a reading strategy. The teacher may also instruct the students to watch carefully to determine whether he/she includes all the steps, do the strategy by him/herself, ask the students for the next step or rationales for particular steps, and ask the students what they observed the teacher doing (e.g., "What was the first thing I did, Sally?" "Did I leave out any step, Carol?"). This approach is most appropriate for a simple strategy that takes only a couple of minutes to perform, or for a strategy which is especially foreign to the students' experience.

For other strategies, the students may have had some relevant experiences and/or may be able to participate in the modelling. For example, if the strategy involves writing a paragraph, the group might participate by contributing appropriate sentences which the teacher writes on the board. The teacher must ask questions to solicit student participation (e.g., "Can you give me a topic sentence for a paragraph about whales, Jesse?"). Although the model is still provided the students receive the extra benefit of participating in the modelling; because of this participation, their attention is focused more closely on the model. This open participation also allows for students to contribute incorrect models. This can be helpful by indicating to the teacher that the student does not understand the steps of the strategy; however, the

teacher must be careful to provide gentle feedback to the student while shaping his/her incorrect response to produce a correct model. For example, the teacher can turn an incomplete sentence into a complete one, showing the students how to make a complete sentence in a matter-of-fact way (e.g., "O.K., Bill, that sentence is not complete, but we can make it into a complete topic sentence by adding a verb. What verb shall we add, Cathy?").

Step 4: Verbal Rehearsal of Strategy Steps

This step familiarizes the students with the sequence of skill steps and enables them to remember the steps when a list of the strategy steps is not available. Thus, if they know the strategy steps, they will be able to give themselves instructions on what skill step they need to perform. A person who is able to self-instruct is more likely to use the skill appropriately in new situations.

In order to do the verbal rehearsal, the teacher should begin by saying something like, "Let's see if we can remember the skill steps that we've been discussing. I'll start by naming the first step and I want each of you to name a step in order as we go quickly around the table." Students should be allowed to look at the steps on the board for the first few rounds. The steps should be erased for later rounds. The teacher names the first step and points to each participant when it is his/her turn to name a step. The momentum should be kept up from person to person. The teacher should go over the entire skill several times, starting the first step with a new person randomly appointed each time. Each student should have a sufficient number of opportunities to respond.

This training step should move very quickly and should be treated like a game. If a student cannot think of a step, the teacher quickly

points to the next student to keep the game moving. Mistakes should not be dwelt upon. For example, if a student forgets the next step and gives one that appears later on, the teacher can say, "Good, that's one of the later steps", and ask the next student to present the step which was left out.

During group verbal rehearsal, the teacher should note which students experience difficulty with the game. If a participant stumbles each time it is his/her turn, the student may need individual attention toward the end of the lesson. Students who have difficulty naming the skill steps typically have trouble performing the skill, because they cannot remember what to do next.

Other ways of approaching verbal rehearsal with a group of students include having the students pair up and rehearse with each other for a few minutes, taking turns naming the steps in rapid-fire succession, or each going through all the steps. The teacher should circulate among the pairs to detect students who are having difficulty. Also, the students may rehearse individually. Again, the teacher must circulate among them to monitor this practice activity. Whether the above approaches work with a given student group depends on the students. We have found the group rapid-fire rehearsal to yield the best results in the shortest time. The students seem to attend to the task better and to accomplish the goal of learning the steps faster.

Whatever approach is used in this teaching step, each student must reach an individual mastery criterion on the verbal rehearsal of the strategy. Therefore, after the students have practiced the rehearsal, the teacher needs to test each student individually on the verbal recitation of the steps before moving on to the skill practice.

Step 5: Practice in Controlled Activities and Feedback

The students must now practice the strategy to a given mastery criterion. For the most part, this practice must be conducted individually. That is, the students can be instructed as a group on what to do and how to practice. Then each student will be provided with materials at his/her ability level, and the group will break up, with each student moving to a different part of the room for individual practice.

Another variation consists of having the students work in pairs as they practice. The choice of this option depends on the students being trained and the adaptability of the technique to a given strategy. For example, some students do not accomplish much if they work with peers; others can learn a great deal in this manner. Some strategies, such as the listening strategy, must be trained individually, with each student listening to a tape through headphones to avoid disturbing other students who are not working on the strategy. However, other strategies lend themselves well to paired work. The paraphrasing strategy, for example, might be practiced in pairs with the students taking turns reading aloud and paraphrasing what their partner read.

The teacher's role during the practice time is to circulate among the students to keep them attending to the task, answer their questions, and provide them with feedback about their work. The teacher should divide the class time equally among the students such that each student receives approximately the same amount of attention. As it becomes apparent that students have reached the point where they can attain mastery, the teacher must test them individually. At this point, it is wise to provide waiting students with tasks that they can perform with little supervision. Alternatively, students who have reached mastery

can be paired with waiting students to give them "practice tests" or other kinds of help.

When the teacher gives students positive and corrective feedback, he/she also continues to encourage student practice until mastery has been reached. Feedback is usually given on an individual basis as the teacher circulates among the students. However, in some situations and with some strategies it may be possible to have the students come together as a group for feedback. For example, when the students produce permanent products like a paragraph, the paragraphs could be duplicated and passed out to the group. Group members can then take turns providing feedback to each other. Another alternative involves having the teacher tell a student he/she did a good job and then ask the other students to tell why and to point out specific examples. If one student is having difficulty, the other students can be encouraged to provide assistance and/or examples. The teacher must take care to prompt the students to give each other positive feedback in proportion to the corrective feedback (e.g., "Tim, what did Bob do right in this paragraph?"). Otherwise, if only corrective feedback is given, the students will find the group feedback process to be a negative experience. They will be reluctant to participate in it in the future.

Step 6: Practice in Grade-Appropriate Materials and Feedback

In this teaching step, the students practice the skill in their own classroom (grade level) materials or on tasks similar to those they would be responsible for in a regular classroom. For the most part, the suggestions for Step 5: Practice in Controlled Activities and Feedback apply here. Pairing the students for practice may be especially useful if two students are enrolled in the same regular class where the strategy

can be applied. They can practice the skill together using the class materials and can reinforce each other's use of the strategy in the class. Regardless of how the strategy is practiced in grade-appropriate activities, students must be tested individually to determine whether they have met criterion.

Step 7: Generalization Activities

Three types of generalization activities are included: Awareness Activities, Activation Activities, and Maintenance Activities. For the Awareness Activities, the students who have mastered the strategy can be made aware of the generalization goals. Group discussions can be conducted about situations in which they plan to use the strategy and cues for when to use the strategy appropriately. Again, the teacher should act as a facilitator ensuring frequent student participation. The teacher can list the situations and cues on the board as the discussion proceeds and have the students copy the lists for their notebooks. As a group activity, students can make cue cards of the strategy steps to be attached in their textbooks or notebooks for future reference. Products that the students have handed in to their regular teachers may be analyzed by the group, with the teacher facilitating both positive and corrective remarks.

For the Activation Activities, the students must use the strategy on assignments in their regular classes. These activities cannot be carried out as a group, although students in the same class may be supportive of each other by cueing each other to use the strategy, helping each other use the strategy, or reinforcing each others' use of the strategy.

The Maintenance Activities are also accomplished individually. Here the student demonstrates that he/she remembers the strategy in

regular maintenance checks. The student also sets goals for continued use of the strategy in his/her everyday life. Again, students can be supportive of each other in their regular classes to promote continued use of the strategy.

General Principles for Teaching Learning Strategies to Groups

A number of teacher behaviors have been found to be useful in conducting group lessons. Many of these have been adapted from those described by Hazel, Schumaker, Sherman, and Sheldon-Wildgen (1981) as effective for leading group training of social skills with adolescents. Others have been added as a result of KU-IRLD research. The specific teacher behaviors must be used throughout the strategy training if the students are to be attentive, if their participation is to be maintained, and if they are to continue to be motivated to try hard throughout their training.

Communication of expectancies to the students. The students need to know what is expected of them in the group lessons. They need to know how they are expected to behave and what they are expected to learn. Such expectancies can be communicated by telling them how the group will function and by specifying rules for group behavior (e.g., "Only one person will speak at a time"). The teacher can also communicate what they are expected to accomplish each day by announcing at the beginning of the lesson what they are going to do (e.g., "Today, I will demonstrate the Survey Strategy for you and then you will rehearse the steps of the strategy until you can say all the steps in order"). The teacher can also communicate expectancies to the students by firmly announcing the mastery criterion for the skill, keeping written track of each student's progress (e.g., on progress charts), and insuring that

each student reaches mastery before moving on to a new skill. The students must know that the teacher is serious about the work they are doing and their progress.

Programming adequate opportunities for student involvement. Students must be given frequent opportunities to participate if their attention is to be maintained and if disruptive behavior is to be kept at a minimum. At the same time, this is one of the most difficult teacher behaviors; it is more difficult to get a student to present material than for the teacher to present the material him/herself. Nevertheless, students become disinterested if the teacher lectures. As a rule, when teaching groups, the teacher should make no more than two or three statements before programming an opportunity for student participation.

Student participation and continuous attention is best facilitated when the teacher asks a question of the group followed with a student's name. As a result of this procedure, all the students will listen to the question and begin formulating an answer, since they do not know who will be asked to answer the question. Also, by calling on particular students, the teacher avoids the delay involved in waiting for someone to volunteer or the possibility that one student will answer a majority of the questions. In general, the questions should be open ended and require more than a one-word answer. Examples of the types of questions that may be asked were provided in the previous description of the instructional steps.

Attentiveness to each student. While leading a group lesson it is important that the teacher be alert to every behavior being emitted by the students. Consequently, the teacher must use visual and auditory senses at all times to "tune in" to each student as an individual. The

teacher should look at all the students frequently to observe their facial expressions, their body language, their attentiveness, and their disruptiveness. The teacher should also listen to what the students say and the voice tones used. Only in this manner will the teacher be able to determine how the students are responding to a given strategy and the group teaching format. In addition, alertness allows the teacher to quickly zero-in on disruptiveness, students who do not understand the material, or those who are "hanging back" from group participation.

To ensure a high level of attentiveness the teacher must be able to do several things at once. For example, the teacher may be writing on the board, talking about what is being written, and listening for student responses at the same time; or he/she may be listening to one student's verbal response while watching another student's physical response out of the corner of an eye. Doing two or three things at once is necessary if the teacher is to stay in touch with each student in the group to insure that each reaches the instructional goal at approximately the same time. Particular attention must be paid to quiet students who tend to hang back and to be reluctant to participate.

Lively pacing. Lively pacing is an important feature of group instruction to maintain student attention and to accomplish as much as possible in a class period. Lively pacing involves the elimination of "down" time where nothing is happening, digressions from the topic, and wasted time when students are not sure what to do next. In order to achieve lively pacing, students should know each day how to get ready for instruction so that they have the necessary materials and are ready for instruction when the bell rings for the start of class. Similarly, the teacher must be prepared such that all necessary materials are ready

and at hand. The teacher should also be familiar with the information to be covered and think of appropriate questions to ask in advance of the class. A teacher who has her/his eyes on the book is less likely to have the attention of the students than a teacher who has eye contact with the students. Likewise, a teacher who is familiar with the information is better able to speak and ask questions at a brisk pace than one who is not. Such preparedness eliminates lag time between teacher-presented information and student participation. If a student takes the discussion to some off-topic material, the teacher should give the student feedback about such a digression in a matter-of-fact way (e.g., "That's an interesting idea, Pete, but right now we need to discuss the conditions under which we can use Multipass") and call on another student to bring the discussion back to the topic (e.g., "Can you give some conditions under which you'd use Multipass, Kevin?")

Variation of activities. All of us become bored when we repeat the same activities over and over. Novelty or variety often catches our attention and renews our enthusiasm about a task. Thus, it is important for the teacher to inject some variety or "spice" into the learning situation especially if the group has worked on a strategy for several weeks. If, for example, the students have practiced individually for one week they can practice in pairs the next week, or give demonstrations in front of the whole group. Different kinds of materials can be used for reading strategies and different topics can be suggested for writing strategies. The teacher should use her/ his own creativity to vary the daily activities.

Praise. Praise is one of the more important tools in a teacher's repertoire. For students who have experienced much academic failure, an

adequate measure of praise is crucial if they are to succeed in any academic program. In praising someone, a teacher must be careful to: (a) be specific about what the student has done well, and (b) be enthusiastic and sincere. The students will need to know what they have done well if they are to repeat a successful performance in the future. Thus, the teacher must name the specific successful behavior (e.g., "You did a nice job dealing with those questions by locating the right sections of the book"; "This is an excellent topic sentence; it tells the reader what your theme is about"). In addition, when giving praise, the teacher should maintain eye contact with the student, have a pleasant facial expression including a smile, emphasize adjectives, and use varied inflections in voice tone. If these suggestions are followed, the student will be more likely to accept the praise as sincere and to use the new skills in the future.

Humor. Students are more likely to enjoy learning if learning takes place in a pleasant atmosphere. Appropriate use of humor is one way a learning situation can be made pleasant. Students tend to respond positively when humor is sprinkled throughout the strategy instruction. For instance, students like the teacher to occasionally tell a funny story about something related to the strategy they are learning. They enjoy unexpected happenings, like the teacher announcing a "pop quiz", passing out test papers, and then saying he/she was joking. They enjoy the teacher laughing with them when they say something funny. They enjoy the teacher laughing at him/herself when he/she makes a mistake. They enjoy the teacher modelling the "wrong way" of doing a strategy in an exaggerated manner. And they enjoy joking with the teacher occasionally.

These types of humor help the students relax in a group situation and tend to enhance student-teacher relationships. To ensure such enhancement, humor should never be used at the expense of a single student. If this happens or is allowed to happen, that student will likely become isolated from the group, will not seek the teacher's help, and will avoid, as much as possible, anything associated with the unpleasantness. Thus, although it is important to use humor frequently, it is important to use it judiciously.

Creation of a pleasant atmosphere. The atmosphere surrounding the group sessions is critical to the success of instruction. If the teacher is always stern and serious, the students are likely to ignore instructions and ideas, miss class, and avoid contact with the teacher as much as possible. On the other hand, if the teacher is pleasant, the students will like coming to class, will seek out the teacher's help in many ways, and will be enthusiastic about the skills the teacher is trying to teach them.

In order to be pleasant, a teacher must have a pleasant facial expression while treating students in a fair and matter-of-fact way. The use of smiles, eye contact, and a lively voice tone is important. Frowns, disgusted looks, and "eyeball rolling" are to be avoided. To show interest in the students, the teacher should lean toward them and look at them while they speak. The teacher should avoid stern lectures in front of the group; instead, each student should be given individual corrective feedback privately. The student should first be told what he/she has done well; in a concerned tone of voice the teacher should then tell the student how he/she can improve (e.g., "Kathy, this topic sentence was excellent, and you have six good detail sentences. You

forgot a clincher sentence, though. A good clincher sentence sums up the whole paragraph and ends it gracefully. What would be a good clincher sentence for this paragraph?). Corrective feedback given in a concerned, matter-of-fact manner can be very helpful and is rarely unpleasant for the student. Conclusion

This article has outlined procedures for delivering effective group instruction to LD adolescents. The student/teacher ratios of most resource rooms require students to be taught in groups consisting of 3 to 8 students rather than on a 1-to-1 basis. Instruction provided in group situations can be as powerful and effective as that provided on a 1-to-1 basis if the teacher applies sound instructional procedures based on established learning principles. This article has outlined specific instructional procedures that can be used to promote the acquisition of specific learning strategies in group settings. The suggested instructional steps have been validated on LD adolescent populations by the University of Kansas Institute for Research in Learning Disabilities. Equally important for ensuring success in group teaching is the LD teacher's style and behavior. Consequently, a broad array of behaviors have been outlined that, when systematically integrated into instruction, greatly enhance the probability of successful instruction of LD adolescents.

References

- Alley, G. R., & Deshler, D. D. Teaching the learning disabled adolescent: Strategies and methods. Denver: Love Publishing Co., 1979.
- Deshler, D. D., Alley, G. R., Warner, M. M., & Schumaker, J. B. Instructional practices for promoting skill acquisition and generalization in severely learning disabled adolescents. Learning Disability Quarterly, 1981, 4, 415-421.
- Deshler, D. D., Schumaker, J. B., Alley, G. R., Warner, M. M., & Clark, F. L. Learning disabilities in adolescent and adult populations: A summary of research findings. Focus on Exceptional Children, 1982, 15, 1-12.
- Deshler, D. D., Warner, M. M., Schumaker, J. B., & Alley, G. R. Learning strategies intervention model: Key components and current status. In J. McKinney & L. Feagans (Eds.), Current topics in learning disabilities. New York: Ablex Corp., in press.
- Hazel, J. S., Schumaker, J. B., Sherman, J. A., & Sheldon-Wildgen, J. ASSET: A social skills program for adolescents. Champaign, IL: Research Press, 1981.
- Schumaker, J. B., Deshler, D. D., Alley, G. R., & Warner, M. M. Evaluation of a Learning Strategies Intervention Program at the secondary level (Research Report #67). Lawrence, KS: University of Kansas Institute for Research in Learning Disabilities, 1982.
- Schumaker, J. B., Deshler, D. D., Alley, G. R., Warner, M. M., Clark, F. L., & Nolan, S. Error monitoring: A learning strategy for improving adolescent academic performance. In W. M. Cruickshank & J. W. Lerner (Eds.), Best of ACLD, Vol. 3. Syracuse: Syracuse University Press, 1982.
- Siegel, E. The exceptional child grows up. New York: Dutton, 1974.