

"UP TO THIS POINT, THE MODULE HAS BEEN USED PRIMARILY IN COLLEGES AND UNIVERSITIES. HOWEVER, IT IS APPARENT FROM THIS RESEARCH THAT IT CAN BE USED PRACTICALLY AND EFFICIENTLY IN OTHER AREAS OF EDUCATION."

# MODULES CAN PROVE HELPFUL AS A TRAINING AID

BY ROBERT N. CARTER  
AND SYLVIA M. CARTER

The use of the module as a method of instruction can be a significant aid in improving efforts in continuing education. Research and application have shown it to make valuable contributions in teaching new-benefit programs to insurance representatives, concepts and skills in reading, methods of personal salesmanship, techniques of systematic leadership and supervision, and for teaching training procedures to personnel trainers.

The purpose of this article is threefold: to relate the kinds of results that may be expected from using the module as an instructional aid; to indicate how you should prepare the module and prepare yourself to instruct with it; and, to give precise detail on how to implement the module as the central focus in a training session. These comments and this plan involve a seminar situation and are devoted particularly to a two-hour segment of the longer seminar.

For those who are now using pretraining and posttraining tests,

but who are not using the module as a method of instruction, the module may provide a way to determine how much the learner can increase his or her knowledge during a training session. For those who are not using tests, the use of the module may be a convenient vehicle with which to implement testing.

## Results To Be Expected

Knowledge before and after training can be measured; the change in knowledge can then be calculated. Data in Figure 1 show the results of the measurements in several seminars. The trainees in these seminars were retail-store departmental managers and retail-store sales specialists as well as savings-association counselors, tellers and managers. Each group was being instructed in methods and techniques of personal salesmanship. The training occurred in the form of two and three-day seminars.

At least two points merit special recognition in these data:

*pretraining test score averages indicate that each group*

*could benefit from training (i.e., could learn more about the subject)*

*posttraining test score averages indicate that each group did benefit from the training (i.e., did learn more about the subject)*

One can conclude that the trainees were more aware of the methods and techniques of personal salesmanship at the end of the seminar than they were at the beginning . . . *they had learned!* Applied research is continuing in comparing and measuring the results of using this method of instruction to the results obtained in using other methods.

There appear to be other advantages in using the module as an aid to instruction, and these seem to fit naturally into the broad categories of mechanical or physical and psychological or mental. Some of the mechanical-physical benefits are that the module is simple to write, easy to handle, inexpensive to reproduce, provides a basis for objective measurement, and introduces variety into instruction. Some psychological-mental bene-

**"THE PHILOSOPHY  
SUPPORTING THE MODULAR  
METHOD IS TO GIVE EACH  
LEARNER THE GREATEST  
CHANCE FOR VARIOUS  
EXPOSURE AND  
REINFORCEMENT DURING A  
LIMITED AMOUNT OF TIME."**

fits are that the nature of the module encourages trainee participation, emphasizes trainee responsibility for learning, provides continuous trainee reinforcement, and facilitates learner self-pacing.

### Preparing the Module

It is important to look at the training session from the point of view of the trainee. Whether or not the trainee is familiar with the material to be mastered is apparently incidental. The material may seem unique to the trainee simply due to the method being used in relating it, and due to the way in which the material is organized or the style in which it is written. It must also be remembered that the trainee, as most of us, cannot be expected to concentrate for a long time, nor can he or she be expected to absorb an unlimited amount of material. Therefore, it becomes crucial to follow three guidelines in the use of the module as an instructional aid:

1. Use all methods and opportunities to provide the learner/trainee with reinforcing experiences.

2. Prepare to use every minute of training time to accomplish a positive function and goal so that it is implicitly clear to the trainee that instructing and learning are of the utmost importance to the organization and to the individual.

3. Demonstrate leadership by being prepared to instruct and by showing the confidence of this preparation in teaching activities.

The material which is to be presented should be segmented into sections that require no more than 25 minutes of study time for thorough reading. And, the amount of material should not exceed 10 typewritten pages or about 2,000 words.

The following outline is prepared for a two-hour training session

using a module as the base. Once the topic and limited amount of material to be presented in one modular session have been considered, a tentative outline can be prepared. Comments shall be made on each of the identified activities shown in the outline.

Time Allocation	
5 (min.)	Introduction of session
2	Hand out pretraining knowledge inventory
15	Trainees complete inventory
2	Collect inventories
3	Hand out module
25	Trainee study time
	Instructor scores inventories and calculates mean and median scores
2	Hand out corrected inventories
8	Trainees discuss, compare, review inventories and scores
	Instructor places all scores on board using simple column or scatter diagram
2	Collect pretraining knowledge inventories
20	Oral reading review technique
25	Individual role playing or small group case problem/buzz session
2	Hand out posttraining knowledge inventory
11	Trainees complete inventory and turn in as finished and take break

### How To Use the Module

The instructor must introduce the session very carefully, and should explain in detail what is going to happen and why the training is to be done in this way. It is helpful to provide each trainee with a copy of the outline so that he or she can follow the introductory comments.

The instructor must be sure to stress that the philosophy supporting the modular method is to give each learner the greatest chance for various exposure and reinforcement during a limited amount of time. *This point is crucial.* It should be repeated. The objective of the modular session is to encourage the most learning in the shortest time.

The idea can be made crystal

clear through illustration with the knowledge inventories or tests. The goal and reason for using the tests is to provide the learner with more opportunity for exposure and reinforcement. The test questions should have been selected to represent important points and highlights of the material to be presented. If this has been done, trainees can be told that the questions represent highlights of the material, that after taking the pretest, reading and studying the module, they will easily discover the answers. As they take the posttest, the same thing will happen. This is the goal of the entire organization: continuous exposure and reinforcement.

Trainees should understand that the tests are not for evaluative purposes and are not used to determine whether one passes or fails, or be used to judge performance. They are used to help one learn. The better one scores on the posttest, the more he or she may consider that he or she has learned. The instructor must make the trainee understand that the tests and other activities are not failure mechanisms, but are, indeed, success mechanisms. When the instructor accomplishes this in a positive and dynamic manner, he or she will have helped the trainee see learning in the more stimulating light of potential personal benefit.

The modular method was recently presented to a training group in Atlanta, Ga. One person was extremely interested and prepared a module to use in a two-hour training session the very next week. One of the mistakes this trainer made was in treating the knowledge inventories as evaluators; consequently, the testing part of the modular instruction became a failure mechanism. Once



corrected, this person used the module very effectively. She had learned a vital lesson. Greatest emphasis must be given to reinforcement when using the modular method of instruction.

**Pretraining Inventory**

The instructor next distributes the inventory, emphasizing again that the test is for learning, teaching and reinforcement. When this point is made, the trainee need not be afraid to place his or her name on the test. Should the instructor prefer to assure anonymity of the trainees, each test may be numbered with a previously prepared identification list.

The instructor is now ready to score the pretraining inventories, to calculate the average or mean, and to determine the median or the score which appears most frequently. As the modules are given

out, the trainees should be instructed to read the material and, after having read it, to study the central points.

Corrected inventories should be returned to the trainees at the end of the study period. While the students discuss, compare and review their inventories and scores, the instructor should list all student scores on the board or easel sheet. The scores may be placed in column form or they may be shown in a scatter diagram. With either method, the students will notice that most scores are low and that the scores are similar. The evidence in the scores should lead the group to two conclusions: one, that each member of the group has something in common with many other group members and two, that everyone in the class can benefit from the training.

Trainees will be very curious and have many questions when the time limit for reviewing the scored inventories expires. However, questions should not be answered at this time. The trainees should be told that all questions will be answered as additional activities are undertaken. All inventories should be collected at this time in order to move on to the next phase.

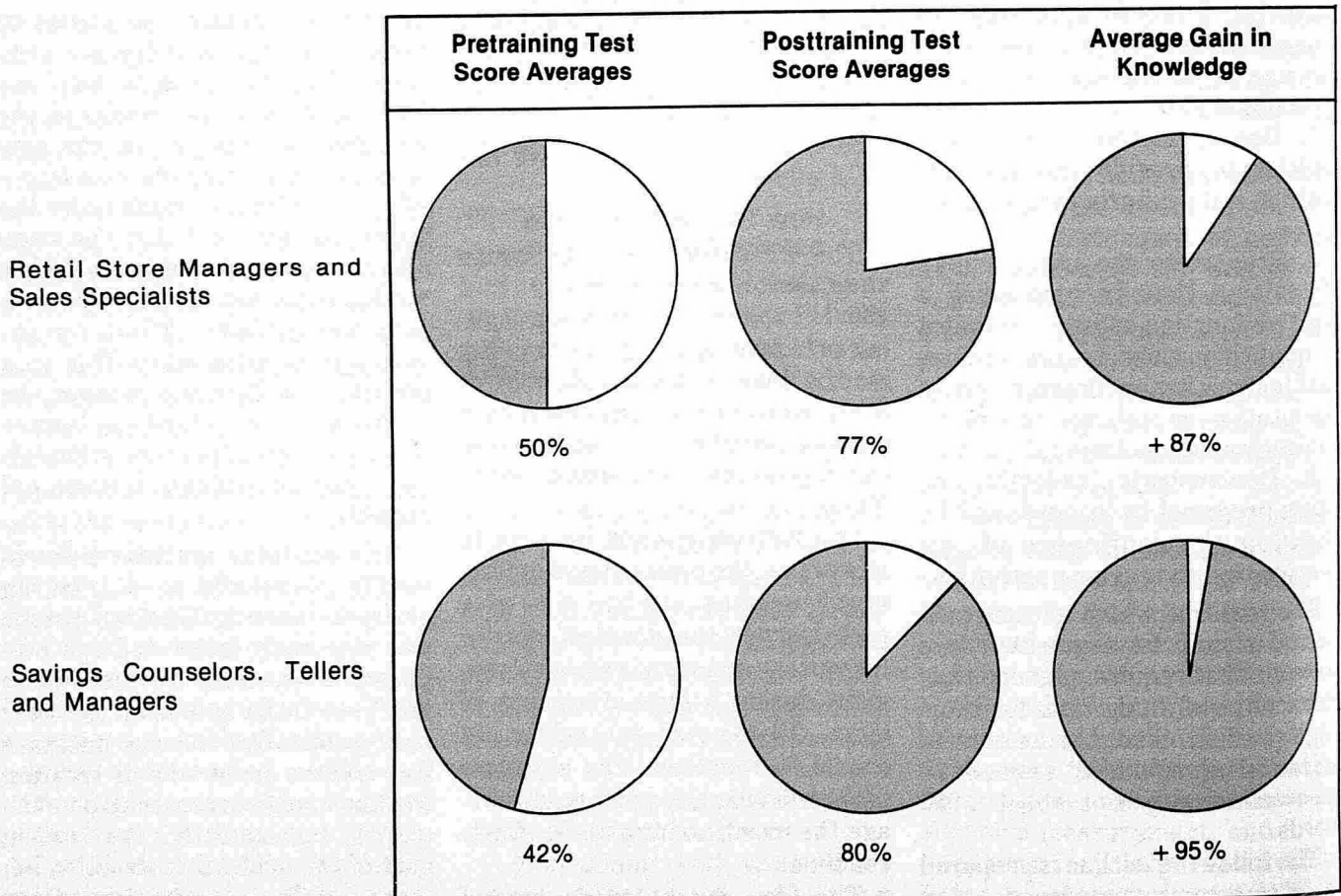
Where there are more than 17 or 18 trainees in the group, it should be divided. An additional instructor should work with part of the group in another room. It is very important that test scores not be used to separate the class into groups. Rather, the instructor should select some objective line or point to be the divisor. A possible way to do this is to divide the class by the right and left halves or by

**Figure 1.**

**KNOWLEDGE GAINED BY TRAINEES WHEN TAUGHT WITH THE MODULAR INSTRUCTION METHOD**

**TRAINING GROUPS**

**AVERAGE TEST SCORES AND AVERAGE CHANGE IN KNOWLEDGE**



**"THE MODULAR METHOD IS TIRING. THE INSTRUCTOR MUST BE THOROUGHLY PREPARED AND MUST BE ALERT, ORGANIZED, AND KNOWLEDGEABLE. IT IS MOST IMPORTANT THAT THE INSTRUCTOR'S ATTITUDE BE CONFIDENT AND POSITIVE."**

the front and back halves. This method of division will normally provide a good mixture of people and scores. It will also help avoid the identification and segmentation of individuals by higher and lower scores.

The instructor tells the group what is about to happen. An oral reading review will take place. He or she may compare the review to brainstorming, explaining to the group the need to relax and remember what they can about the module they have just studied. Whatever a group member recalls whether it be a word, phrase, sentence, thought, or idea, he or she is to call it out immediately. The comment will help someone else recall something which is to be called out also. This procedure then continues.

It is the responsibility of the instructor to categorize and organize the information on the board. Trainees will call out anything they remember, and often, it will not follow any organized pattern. When the board is covered with words in this unorganized form, the instructor may stop the class and erase the board, and may then place major headings, key words and phrases back on the board to illustrate an organizational pattern. It should be obvious to the students that the organizational pattern corresponds to the heading outline of the module. The review may now be started again until all of the key concepts have been brought out.

#### **Continued Reinforcement**

Individual role-playing or small-group work concludes the final session of major reinforcement. If interpersonal or communication skills were studied in the module, role-playing may now be used. With role-playing, it is helpful to remind the trainees that the skills

have been studied in the module. The instructor should then provide time for the students to prepare before they role-play.

When case problems or buzz sessions are appropriate, the solutions should be easy to determine, and they should continue to reinforce the more important ideas. Trainees can be separated into teams of three or four with a secretary and a reporter assigned in each group. The secretary may record the conclusions while the reporter's job is to present them to the class members. Each team may be assigned several topics for discussion so that another complete review of the module can occur.

The instructor should inform the students that they may begin the break period as they complete the posttraining test. During the break, the instructor will score the second inventory and, once again, list all scores. The trainees may be called into informal session during the break to receive their papers, scores, group average, and the group's median score. They are likely to be pleased with the improvement in scores.

#### **The Method is Tiring**

The modular method is tiring. The instructor must be thoroughly prepared and must be alert, organized, and knowledgeable. It is most important that the instructor's attitude be confident and positive. Sometimes, trainees will seem to dislike the modular method initially, perhaps because of skepticism or apprehension concerning the active involvement which is required when the module is employed. Such an attitude may be present particularly where previous training has consisted predominantly of lectures, films and filmstrips, and other methods where participation is primarily passive. The instructor should not

be discouraged. Most trainees will appreciate the new method of instruction by the end of the modular session.

Nonetheless, the instructor must be most sensitive to trainee needs and limitations. Some students may be unable to read well, either reading slowly or with poor comprehension. These students will need special counseling sessions after the general sessions are completed.

Only one module should be used in a half-day session. The work is difficult, and one two-hour session tires students and instructors. Beyond two hours everyone becomes exhausted. Nor is it advisable to use more than two two-hour modules in one day.

The module has been used, up to this point, primarily in colleges and universities. However, it is apparent from this research that the module can be used practically and efficiently in other areas of education. It allows learning results to be measured; it encourages the student to accept responsibility for his or her own learning; and, it is an easy and simple method for both instructor and trainee alike.

More research and documentation are needed in the use of the modular method of instruction as a teaching aid. Correspondence regarding the use of this method is welcome.

---

Robert N. Carter is associate professor of Marketing and Management at Southwest Texas State University. He is also a practicing sales consultant and has worked for various clients in 44 of the United States, Canada, and Panama.

Sylvia M. Carter is assistant professor of Reading Education at Southwest Texas State University. Her teaching experiences include elementary, educational television, college, and noncollege adult work. She is an author for Scott-Foresman Publishing Co.