

HELPING STUDENTS TO LEARN

Eight Methodological Factors that Can Make a Difference

By HUBERTO M. RASI

Conscientious teachers are always looking for new methods, new approaches to become more effective. In several areas, however, research seems to confirm traditional principles of good teaching.

A review of the literature shows that the authors have focused their attention on the various components of the educational equation:

1. Philosophy (world view, controlling beliefs, objectives, values),
2. Curriculum (content, sequence, pacing),
3. Atmosphere (buildings, organization, discipline, extracurricular activities),
4. Resources (laboratories, library, textbooks, equipment, teaching materials),
5. The learner (psychological and physiological factors), and
6. The teacher (training, personality, pedagogy).

Each of those elements plays an important role in teaching and learning. In this article we will consider only one area—basic methodological factors that help students to learn.

Let's imagine a hypothetical case of (a) two teachers of roughly the same age, training, and experience, who (b) are responsible for two average groups of students at the same grade level during the same length of time, and who (c) teach them the same subject in the same school setting and with similar educational resources. Let's also imagine that at the end of the school year we submit both groups of students to the same examinations to determine what they have learned under each of those teachers. Let's finally imagine that after computing the results, we find that one of the groups achieved much better results than the other.

What has caused the difference? Why, if conditions were similar in most respects, did one group master the course content better than the other? Our first inclination, naturally, would be to look at the teaching methods of each of their teachers. Perhaps here we will find some clues.

Although I have described a hypothetical study, most of us have experienced or observed similar results—either in our own schooling or among our professional colleagues. Therefore, it is valid to ask, What basic factors actually assist student learning?

David Bowman has analyzed these methodological ingredients in a valuable article that I will use, with a degree of freedom, as the basis of my own review.¹ The following eight-point

The teacher must explain concepts by using language that the students can understand... and must seek to foster a class environment of respect and trust, both among students and between teacher and student.

outline may allow you to do some self-assessment and—if appropriate—improve your methods.

Clarity

The teacher must highlight for the students the most important elements in the subject taught. If a teacher's classroom presentation lacks clarity, it is disorganized, vague, and confused. Several elements of clarity are worth noting:

1. *Rationale.* The teacher must help the student understand the reasons for studying this particular subject, its value, and its relationship to the rest of the curriculum. When shaping his or her approach to the subject, the teacher needs to develop a rationale for selecting a particular teaching strategy, and consider whether other approaches might be more effective.

2. *Structure.* The teacher must divide the subject matter into logical sections, so that the students can easily assimilate them. To ensure learning and retention, the teacher should stress important points in the lesson before, during, and after teaching it.

3. *Sequence.* The various components of the subject matter should follow one another naturally. This will enhance student learning and retention. Possible linkages or sequences include the chronological, spatial, causal, ascending-descending, problem-solution, and the topical.

4. *Frame of reference.* The teacher must explain concepts by using language that the students can understand, within their frame of reference. If technical terms are required by the subject matter, the teacher must clearly define them.

5. *Illumination.* To ensure compre-

hension, the teacher should approach the topic from various angles. In so doing, he or she can use explanation, comparison, contrast, illustration, specific instances, statistics, restatement, and visual aids.

Variety

The effective teacher uses different teaching strategies, so that students with diverse inclinations and abilities can comprehend and retain the subject matter. Teachers tend to utilize the approach with which they feel most comfortable. They may thus disregard other techniques and activities helpful to learning. Exposition, question-and-answer, oral reading, discussion, dramatization, field trips, team work, drawings, reports, poems, photographs, and films can stimulate interest and increase receptivity and retention. In addition, the use of a variety of approaches provides an element of novelty and surprise.

Enthusiasm

The teacher must convey to the students the pleasure and excitement he or she experiences in studying the subject, exploring new angles, and solving new challenges. Although enthusiasm is difficult to measure statistically, students recognize clearly the silent message that the teacher communicates as he or she highlights the intriguing, practical, humorous, or mysterious angles of the subject.

While promoting the value and importance of the subject, the teacher must seek to relate it naturally to other subjects in the curriculum. An interdisciplinary approach to learning can help students see the "big picture" and open up new areas of interest in learning.

The teacher's genuine enthusiasm is also reflected in his or her willingness to explain again—in class or individually—whatever aspect of the subject a particular student failed to grasp. Student reactions—both verbal and nonverbal—provide useful feedback as the teacher seeks to guide the class into greater understanding of the subject matter.

Purpose

Learning occurs when the teacher has an achievement-oriented attitude. This includes the teacher's skill in directing every student toward specific objectives that the student understands and feels capable of reaching. The teacher should cover the subject at a pace consistent with the age and ability of the students.

From the start of the course, the students must have a clear view of the

(a) general direction in which the teacher will advance, (b) the main topics that will be covered, (c) the stages of the process, and (d) the results expected at the end of the term. Although he or she must be sensitive to the questions raised by the students, the teacher cannot allow himself or herself to become distracted from the main purposes of the course.

As they move toward the goal, the students should feel that they are part of a team, that the objectives seem reasonable, and that the teacher is advancing with them, sharing their adventure in learning.

Assessment

The teacher must apply a rational method to regularly evaluate each student's progress, communicating the results of the assessment with objectivity and tact. Tests or examinations should not be used as instruments of class control or student discipline.

Use of a variety of approaches—oral, written, individual, group—can help measure mastery of the subject matter and reveal which topics require further review. Although tests do not always have to be announced, assessments should cover sections of the subject that the teacher has previously assigned, explained, discussed, and reviewed in class. The topics tested should be limited to important concepts, facts, and analysis, excluding "trick questions" or other gimmicks that outrage students and contribute little to their understanding of the subject matter. Students must have confidence in the fairness of the teacher's grading policies and the accuracy of the assessment.

Atmosphere

The teacher must seek to foster a class environment of respect and trust, both among students and between teacher and student. Through words and body language the teacher communicates a commitment to both spontaneity and order. Rules should be few, well considered, and consistently enforced. Everyone should clearly understand what is considered acceptable behavior, and what are the penalties for noncompliance. Retribution should be swift, decisive, and fair.

In each classroom at least three elements interact—student, teacher, and subject matter. Unfortunately, students sometimes feel that the teacher has formed an alliance with the subject matter to make their lives miserable. For learning to occur, students must sense that they are in partnership with the teacher in conquering

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the subject matter. This will give them the confidence to do their best.

To achieve such a social and emotional climate, the teacher must (1) admit without apology the limits of his or her own knowledge and provide expanded explanations as soon as possible; (2) nurture mutual respect; (3) offer constructive critiques and generous praise, thus affirming each student's sense of self-worth; (d) use suggestions and ideas contributed by the students.

Involvement

The teacher must actively involve each student in the learning process. Some students will need a good deal of encouragement, while others may require tactful restraint. The teacher should see himself or herself as an experienced guide and mentor, not necessarily as provider of all possible

available information on the subject. In order for learning to take place, the student must be willing and motivated to learn.

In a participatory environment students (1) have occasion to answer, raise questions, and establish a dialogue with the teacher; (2) perceive a correlation between their own purposes and those of the teacher; (3) feel capable of learning the material being taught and experience the satisfaction of achieving it; (4) have the opportunity to explore and discover facts, principles, and relationships for themselves; (5) be able to practice new skills immediately, frequently, and in varied situations.

Questions

The last factor relating to effective learning relates to the teacher's skill in formulating a variety of oral and written questions. Such questions involve students in the process of learning, stimulate them to reach higher cognitive levels, and allow the teacher to determine how well students have assimilated the subject matter.

Questions can be classified in a continuum, from simple to complex, as follows:²

1. *Knowledge.* The student uses rote recall to answer the question.

2. *Comprehension.* The student restates the answer in his or her own words.

3. *Application.* The answer requires

Continued on page 38

HELPING STUDENTS TO LEARN

Continued from page 14

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transference of rules or principles to new situations.

4. *Analysis.* The answer demands the student to subdivide a learned idea or concept and to analyze its components.

5. *Synthesis.* The answer requires that the student formulate a new idea based on principles or concepts already learned.

6. *Evaluation.* The answer requires the student to apply a standard or value set to a new concept and to justify the results of such application.

Conclusion

These eight methodological factors, presented above in outline form, are based on a review of research on student learning. They form the fundamental principles of instruction.

In analyzing your own teaching, did you find room for improvement? If you make the necessary adjustments you can become the most effective teacher you are capable of being. □

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NOTES AND REFERENCES

¹ David Bowman, "The Method Variable as a Facilitative Factor in the Teaching-Learning Process," *Journal of Christian Education*, 1:2.

² For a helpful and practical book on this topic, see Norris M. Sanders, *Classroom Questions: What Kinds?* (New York, Harper & Row, 1966).

THE TEACHER MAKES THE DIFFERENCE

Continued from page 23

tion in our schools must be diligent, always alert to capture every opportune moment to press home some truth.

5. The God-fearing teacher must seek to adapt his or her methods and approaches to time and condition, ever seeking to integrate faith into learning. This will help the church's children grow into the likeness of Christ, even as they grow into a knowledge of the sciences and humanities.

Such teachers do not occur by chance. They too must be molded in the schools of the church. They must be trained to be Christlike in order to be coworkers with the Divine Teacher. They must learn to love and draw young hearts to Jesus. Such teachers make our schools different, because they themselves are different. They have been trained by the Holy Spirit and have become wise in the things of God.

Responsible school boards and administrators must ever bear in mind that "Wise teachers should be chosen for our schools, those who will feel responsible to God to impress upon minds the necessity of knowing Christ as a personal Saviour."⁶

Adventist teachers trained, rooted, and grounded in their faith live Adventism, teach Adventism, work toward Adventist objectives, and produce the fruit of Adventism. Adventist teachers *can* and *do* make a difference. □

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REFERENCES

¹ Ellen G. White, *Testimonies for the Church*, (Mountain View, Calif.: Pacific Press Publishing Assn., 1948), vol. 4, p. 464, Italics supplied.

² *Ibid.*, vol. 6, p. 193.

³ *Ibid.*, p. 194.

⁴ See Deuteronomy 7:1-6 and 2 Corinthians 6:14-18.

⁵ 2 Timothy 3:17. From *Holy Bible: New International Version*. Copyright © 1978 by the New York International Bible Society. Used by permission of Zondervan Bible Publishers.

⁶ *Testimonies*, vol. 6, p. 152.

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