

COMPUTING WITH CLASS

First Ask, Then Receive

In the February 1987 issue of *Byte* magazine, Albert Bork paints a rather dismal future for traditional teacher-student education in the United States. Some highlights:

- Almost all the developed countries rank higher than the U.S. in recent international mathematics tests.
- Minority, poor, and rural students receive a poorer education than do students from affluent areas.
- Over the next 10 years the shortage of good teachers will continue to grow because
 1. teachers are paid very little compared to professions requiring similar education.
 2. teaching is no longer considered a desirable profession by many people in the U.S.
 3. fewer teachers are trained today (only about one-fifth as many math teachers graduate each year as 10 years ago).
 4. schools of education are, on the average, weak.
 5. students entering teaching today have lower SAT scores than those entering teaching previously.
 6. during the next 10 years about half of the teachers currently teaching will reach retirement age.

Bork adds to the grim scenario by describing negative student attitudes toward learning and the government's failure to finance education. He then cites four case studies where computers have successfully filled the burgeoning void. (Elsewhere in the same issue of *Byte*, however, other authors decry the ineffectiveness of computers as they are currently used in the classroom.)

Few researchers or educators address one most important point—If tomorrow's students will spend a significant amount of time interacting with computers, what attitudes will they need to succeed?

Computers, particularly large networks like *The Source*, can store and retrieve huge amounts of information on just about any topic. Creative indexing enables them to compile reasonably exhaustive reports in a fraction of the time it takes normal students to figure out *where* the local library is, let alone *what* it's there for.

But just like the library, these services go largely unexplored. Why? Two reasons: (1) the attitude that students should not rely on machines to do their work, and (2) the fact that traditional education depends on students answering questions, not asking them.

Not so long ago, a controversy raged over calculator use in the classroom. The question was how to view electronic gadgetry: Is it a crutch that will discourage students from learning the basics or a resource tool to help them discover more creative uses for information?

Credence could be given to both sides of that argument. Children certainly need to be able to calculate sums and estimate the products of multiplication, since they will use these skills in numerous situations where calculators may not be available.

A similar argument regarding computers does not exist. Students cannot be expected to memorize the vast amounts of information retrievable via computer.

This brings us to our second point. The underlying premise of education is that students are to provide answers to questions. Throughout schooling, questions come in a steady stream—quizzes, tests, reports—even theses and dissertations provide answers to posed questions. Unfortunately, an education based on answering questions tends to end when the questions stop.

If computers become the significant influence that they almost must become in an information-based society, the focus will have to shift from learners *answering* questions to their *asking* questions.

Even when they interact with computers, in most cases students are expected to provide answers to the computer's questions. However, viewing computers as primarily a rote drill-and-practice tool drastically limits the scope of their usefulness.

New computer programs require users to attack problems through a series of decisions and choices. The student asks "What will happen if...?" and enters his or her suggestion—whether it is finding one's way through the woods in a computer game, estimating the impact of pollution on a river, or predicting the results of hiring another salesman at a hypothetical company.

Creative uses for computers do not require the student to wait passively for questions such as, "Who was the second president of the United States?" or "What part of speech is *mostly*?" Computer networks that can retrieve huge amounts of information, as well as programs such as those noted above encourage the student to go wherever his curiosity takes him.

An education based on asking questions—and then using available resources to find creative solutions—will continue throughout the student's entire life. Teachers must not be satisfied with training students to answer questions. They must find ways to stroke the attitude so often suppressed in traditional learning environments—that to *ask* is the first step toward educational success.—Dave Ruskjer. □

The author is President of Touch Talk Technologies, Takoma Park, Maryland.

BOOK REVIEWS

Claire L. Gaudiani and David G. Burnett, ACADEMIC ALLIANCES, A NEW APPROACH TO SCHOOL/ COLLEGE COLLABORATION. Washington, D.C.: American Association for Higher Education, 1985/1986, 32 pages, \$5.00.

Tired of drowning in your classroom sorrows, spinning your wheels and going nowhere professionally? So were 5,000 other high school and college teachers. They discovered they have more in common than they thought when they joined one of the 150-plus academic alliances that have been springing up around the U.S. in the past six years.

Modeled on county medical or bar associations, alliances promote truly professional roles for teachers while fostering genuine partnership among school and postsecondary professionals. These scholar/teacher "communities" reempower members, allowing them to take responsibility for their own professional development and for the quality of teaching and learning in their disciplines. Participants report a renewed sense of identity and motivation. Together they are all winners.

With the number of college students now nearly equaling the number of high school students in the United States, college teachers are spending more hours in the classroom. Both college and secondary school teachers are teaching more remedial classes. As a result, they find it much easier to develop consensus and recognize their interdependence than in the past.

Because the mission of the teaching professional is to impart the skills and knowledge necessary for citizens to engage in inquiry, scholars and teachers find a common ground by focusing on the inquiry process itself. This intentional awareness of what one says and thinks causes members to rethink ideas, not just generate new concepts. Their discretionary and innovative activities bring them visibility for their achievements and enable them to deal with important problems in their fields of interest. No wonder they're enthusiastic!

Focusing on the discipline as common ground, action rather than machinery, personal rewards, and dumping of traditional pecking orders makes academic alliances appear similar to Maeroff's *School and College* partnerships. They differ in stressing sustained professional relationships to enhance intellectual growth rather than focusing sharply on a problem that needs to be solved. In addition they emphasize the quality of *faculty* professional life rather than *student* life.

Typical alliance activities include journal reviews, panel discussions, demonstration classes, curriculum exchanges, and reviews of major conferences of general interest to the 12- to 60-member groups. Dominance by postsecondary faculty, outside experts, or a clique is taboo. Member discussions on topics they have selected

and prepared themselves leave no room for lengthy lectures.

Establishment of long-term professional and collegial relations make alliance meetings great scholar/teacher recruitment events for graduate students and student teachers. They also go far to retain quality professionals in the classroom who might otherwise suffer burnout or follow career ladders outside teaching.

Can you join or get an alliance going? Gaudiani and Burnett, guiding lights in the alliance movement, list essential steps in establishing an alliance, and contact persons and financial resources for alliances in foreign languages and literatures, history, international studies, geography, English, science, and mathematics. Here's your opportunity—seize it!—Charles T. Smith, Jr. □

Dr. Charles T. Smith, Jr., is Associate Executive Secretary of the North American Division Board of Higher Education at the General Conference of Seventh-day Adventists, Washington, D.C.

Don Kaplan, CHILDREN AND MEDIA. New York: Instructor Books, 1986. 192 pages. Spiral bound, \$12.95.

Today's children—and adults—are surrounded by the universal presence of hi-tech equipment such as video cassette recorders and Walkman radios. However, people rarely take time to think about the effects of the barrage of electronic stimuli on their lives. Don Kaplan wrote *Children and Media* to help children understand how the media affects their lives and their ability to think.

Kaplan has several learning objectives in mind. He hopes teachers will use the book to help fourth- to seventh-grade children become proficient in verbal and nonverbal communication skills and develop oral expression and writing skills. The underlying foundation for these objectives is the ability to gather, organize, and present information in clear, concise form. He provides opportunities for the students to learn these foundational skills as well.

Children and Media has six sections. The first introduces media in general. Kaplan presents a section each on aural and visual awareness as background to other sections that deal with photography and film making. The final section presents guides for understanding the impact of television.

This book differs from others because each page is a self-contained lesson that helps teachers meet the general learning objectives Kaplan outlines. Teachers can easily reproduce each page for their students. As with many books, you will find a few pages that do not fit the Seventh-day Adventist philosophy of education. This

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is not a major problem, however.

The one-page lessons vary from section to section. For example, in discussing mass media, one of the lessons asks students to keep a record of the advertisements they see in the newspaper, on billboards, or on television. The section dealing with listening skills explores using the radio, recording the sounds around them, and producing a radio script. Section Three teaches students how to look at images, exploring the concept of images and symbols. One of the lessons helps them learn about body language.

The section dealing with photography would fit nicely into the science curriculum. Students learn about sun-prints, photograms, camera concepts, and creating photo stories. Animation and creating movies are suggested projects in the section on film.

The final section investigates life with television. In one lesson students take the "TV Addict Test" to find whether they could survive without television. Another lesson requires students to chart their viewing habits. They fill in information about programs watched, reasons for viewing, and the amount of time spent in front of the TV.

Using the study guides, students survey others and give their own opinions and ideas in oral or written form. They also learn to organize and plan stories they can develop into comics, films, and video productions.

For the most part, teachers will use the lessons for language arts classes, although some are suitable for social studies or science lessons. Many of the guides can form the basis for learning center activities. In this context, the lessons provide enrichment opportunities for students needing an extra challenge without having more of the same work assigned to the whole class.

A helpful addition to each section is a list of books that give more information about the topic under discussion. Thus the teacher does not have to look for his or her own source books to fill out the lesson.

The book may be ordered from Instructor Publications, Inc., 545 Fifth Avenue, New York, NY 10017. It is part of a larger series of teacher resource materials called the Instructor Book Series. The order number is IB432.—Clarence Dunbebin. □

Dr. Clarence Dunbebin is Principal of Sligo Adventist School, Takoma Park, Maryland, and a Contributing Editor for THE JOURNAL OF ADVENTIST EDUCATION.

Roger L. Dudley, PASSING ON THE TORCH: HOW TO CONVEY RELIGIOUS VALUES TO YOUNG PEOPLE. Hagerstown, Maryland: Review and Herald Publishing Assn., 1986. 191 pages, \$12.95.

A few people probably shouldn't bother to read this

book—namely, those who are (1) already familiar with the most important thinking and research on moral development, and (2) satisfied with the way they are communicating ethical and religious values to the young people in their lives (offspring, students, younger church members). But for those who don't meet both of these criteria, Roger Dudley has provided some useful ideas, information, and insights.

Passing on the Torch is addressed to a general Adventist audience. It presupposes no particular familiarity with the professional literature of education, psychology, or ethics. It is replete with appropriate quotations from the Bible and Ellen White, and most of its illustrations are drawn from Adventist faith and life (with many from Dudley's own teaching experience).

After a slow start with a couple of chapters of definitions, Section One gets off the ground with a fresh look at the kind of religion we want to transmit to the coming generation. The answer: a religion that is carefully considered and individually chosen, more concerned with relationships than obedience, integrated and altruistic. Section Two reviews the major theories of moral development (Piaget, Kohlberg) and the most important research (Hartshorne and May, Peck and associates). It also includes reports of two Adventist studies: the Purdue dissertation by Derrick Proctor (1974), which found Adventist academy seniors several years behind other young people their age in the development of moral judgment; and a recent investigation by Dudley and his wife, Margaret (1984), comparing the religious values of teenagers and their parents.

Section Three describes a number of strategies and techniques for developing moral thinking and transmitting moral values—using moral dilemmas, values clarification, value reasoning, parental modeling, et cetera—that can be easily adapted to an Adventist context.

The book makes three main points about moral and religious values: they are freely chosen rather than imposed; they are transmitted by modeling rather than by direct moral instruction; and they are influenced most by parents rather than church, school, or peers.

Like other books, this one provides opportunities for readers who like to quibble. For example, since it is a book on moral education, it might well have expressed some ethical discomfort in connection with research that involves deceiving the subjects who participate in it. And the book might have offered Dudley's own constructive synthesis of the various theories of moral development.

A larger question involves the possibility of an unconscious gender bias (which is ironic, because Dudley is obviously sensitive to matters of gender equality and justice). Following a long and widespread tradition in Christian thought, the book suggests that the principal

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statutes, not on unjust dismissal. Note that such statutes typically exempt religious institutions only from charges of discrimination based on religion, not from those based on the other categories. Religious institutions are generally considered to have great latitude in requiring personal adherence to doctrinal norms and terminating employees not in harmony with such standards (such as an unmarried woman who becomes pregnant), but this latitude is the subject of much current litigation.

4. *The Implied Covenant of Good Faith and Fair Dealing.* The exception which may swallow the whole employment-at-will rule is this implied promise to deal fairly. Starting in the mid-1970s, several state courts have held that the traditional common-law notion that the parties to a contract are required to treat each other fairly and in good faith applies to employee terminations.

Christian administrators already have a moral duty to treat employees fairly, to act consistently, and to show good faith. But if that isn't sufficient motivation, the law now makes a similar requirement.

Does Jack Bridgebuilder have any grounds to complain that another teacher is still employed who is even less competent than he, but who also happens to be the brother-in-law of the secretary of the Board of Trustees? Are you subject to allegations of inconsistency in dealing?

There is no foolproof way to avoid litigation. A disgruntled employee can often piece together rumors with his imagination and make enough of a case to at least get to court. But some precautions are obvious. If you make a promise, be prepared to keep it. If you formulate a policy, be sure it's carried out. If you establish rules, enforce them evenhandedly and impartially. Remember in dealing with every employee or subordinate that your purpose is to represent God and His church, not just to avoid litigation. □

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expression of human self-centeredness is pride (pp. 54, 55). This is surely correct in regard to men, who are, at least in Western cultures, socialized to compete and win. But it may not be equally true for women, who are socialized to serve and please, and for whom temptations to passivity and self-depreciation may be greater than the temptation to self-assertion.

Dudley's emphasis on the necessity of individual thinking about values may thus be especially important for the moral education of young women. In this connection, incidentally, Carol Gilligan's book *In a Different*

Voice (1982) argues that the moral reasoning of girls is different from that of boys.

Passing on the Torch is a very good book—good for teachers at every level, for parents, for pastors, for Sabbath school personnel, and for anyone else who cares about the young people who are the future of the church. If it gets the wide reading it deserves, the whole church will benefit.—Fritz Guy. □

Dr. Fritz Guy is Associate Pastor of the University Church of Seventh-day Adventists in Loma Linda, California, and a Lecturer in Theology at Loma Linda University. He previously served as Dean of the College of Arts and Sciences at Loma Linda University and as a professor at the SDA Theological Seminary in Berrien Springs, Michigan.

OF INTEREST TO TEACHERS

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able income per capita, the report said.

"The study, commissioned by the American Council on Education (ACE), raises the possibility that the steep increases may be temporary rather than a long-term trend. . . .

"The report presents no conclusions about whether tuition increases will continue to soar, but it urges the higher education community 'to intensify its efforts to identify the causes of tuition inflation and to seek solutions.' . . .

"One of the authors, American Enterprise Institute resident fellow Terry Hartle, said that he thinks that tuition increases will return to the lower rates of the past. . . . The rate of tuition increases will have to level off, said ACE President Robert H. Atwell, because potential students would be driven away. 'The middle class will, at some point, get balky,' he said. . . .

"The study—written by Hartle and Arthur Hauptman, a Washington higher education consultant—rejects [U.S. Education] Secretary Bennett's argument that the availability of federal student aid has fueled the increase in college prices. When federal aid tripled during the 1970s, tuition was rising more slowly than inflation, according to the report. . . .

"Hartle pointed out that, despite the rising price tag, public support for higher education has increased since 1978. 'Americans value a college degree,' he said. 'People think it is worth it and continue to buy it. Whether they will continue to do so . . . is an open question.'"—Reported by Barbara Vobejda in *The Washington Post*, February 28, 1987, p. A2.

True Value of Reading

"To read without reflecting is like eating without digesting."—Edmund Burke (1719-1797). □