



# CHRISTIAN EDUCATORS JOURNAL

## IN THIS ISSUE:

Ecumenical Eyes

Peeking in Berkhof Is "Cheating"

Testing in Science



WINTER, 1965



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MANAGING EDITOR: Donald Oppewal, Education Department, Calvin College 1331 Franklin Street, S.E., Grand Rapids, Michigan 49506

BUSINESS MANAGER: Arthur Wyma, 64 East 48th Street, Holland, Michigan 49423

DEPARTMENT EDITORS:

Language Arts: Merle Meeter, Dordt College, Sioux Center, Iowa 51250

Social Studies: Herman Beukema, Calvin Christian High, Grandville, Michigan 49508

The Arts: Vernon Boerman, Illiana Christian High, 2261 Indiana Ave., Lansing, Ill. 60438

Science-Mathematics: Roger Bratt, Calvin Christian High, Grandville, Michigan 49508

Profession-Wide: Samuel Greydanus, Holland Christian High, 32 West 19th Street  
Holland, Michigan 49423

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### STATEMENT OF PURPOSE

The Christian Educators Journal Association, composed of several member or sponsoring organizations, publishes the Journal as a channel of communication for all educators committed to the idea of parentally controlled Christian schools, whether at the elementary, secondary, or college level. The general purpose of the Journal is to foster the continuing improvement of educational theory and practice in Christian schools. Therefore, its pages are an open forum for significant articles and studies by Christian educators on Christian teaching. Editorial policy favors those contributions that are normative and evaluative rather than merely descriptive of existing trends and practices in American education. All articles and editorials appearing in it are to be regarded as the expression of the viewpoint of the writers and not as the official position of the Christian Educators Journal Association or its member organizations.

Business correspondence concerning subscriptions to the Journal or membership in the Association should be sent to the Business Manager. Subscription price is \$ 2.00 for four issues per year, with issues appearing in the months of October, December, February, and April. Correspondence concerning articles or book reviews should be addressed to the editor of the appropriate department or to the Managing Editor.

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## THOUGHTS ON A COVER DESIGN —John Knight\*

Those among us who are "green thumbs" know something of the joy of cultivating prize roses, creating lawns that remain green for most of the year, and nursing sick plants back to health. A lone pine tree jutting from a boulder between Cheyenne and Laramie, Wyoming, testifies to the loving care of passing trainmen, who for decades watered it.

As a boy I found the woods mysterious. The trunks of trees looked like Walt Disney creations, with distorted faces and outstretched arms ready to swoop down. The fate of Absalom became very real during walks in the woods.

One of today's artists I admire most is England's Graham Sutherland, best known for his "Christ in Glory" tapestry in the new Coventry Cathedral. Sutherland is a man of the country who all his life has also been fascinated by tree forms and thorns, the inspiration for scores of his canvasses.

At the end of the third day of creation our world must have been beautiful, with its fruit-

bearing trees and seed-yielding herbs. And from the first to its last chapter the Bible mentions plants, vines, grains, and trees, concluding with the symbolic tree of life. It seems that when Scripture speaks about plants it often symbolizes growth and vigor. Christ himself uses the miraculous growth of the mustard seed to illustrate the power of faith, and we have been pictured as ingrafted in Him, the true vine.

Christian educators have the responsibility to assist in guiding children on the road to mature Christian adulthood. These children and adolescents are as vulnerable to disease and a hostile environment as plants in our (fallen) world. Only when deeply rooted in God's Word, symbolized by the open Bible, will they grow, bear fruit, and glorify their Maker and Lord.

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\*Mr. John Knight, staff artist for The Young Calvinist magazine, produced our present cover design. Here he briefly explains the personal context of his conception of Christian education.



# FROM ME TO THEE

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and other official documents do not use explicitly Christian language or even give explicitly Christian meanings to common terms, then it is true that public schools are secular. If we mean that individual teachers usually do neither of these, then the evidence is less clear.

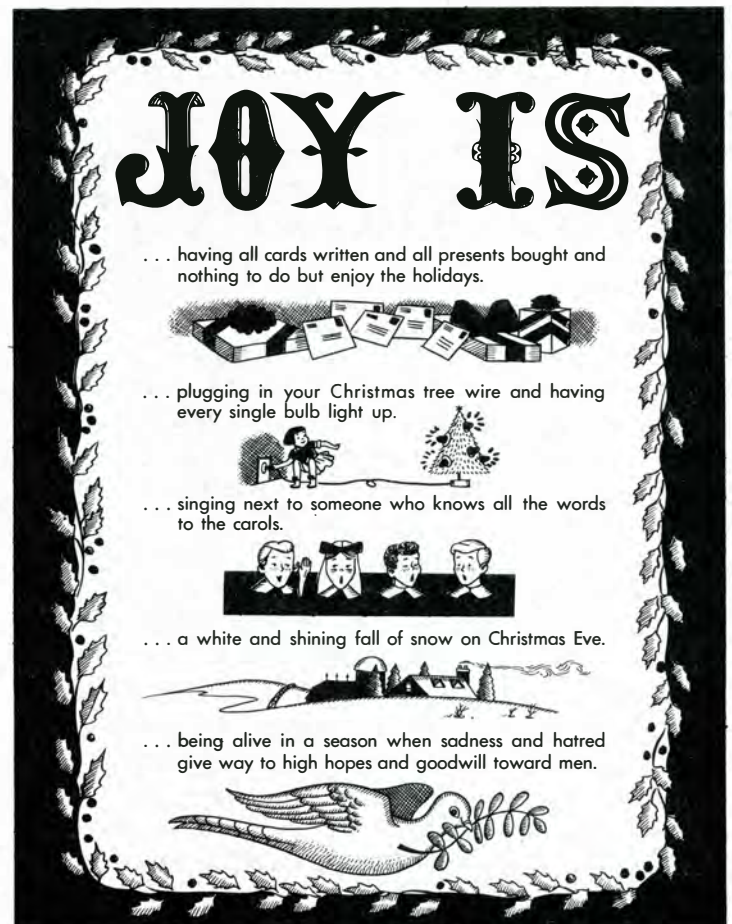
The page reproduced here\* may serve not only as an example of secularism as it appears in teaching materials, but also as a warning to

## "And the Word Became flesh...that your JOY may be complete"

It is axiomatic that the meanings we teachers give to words help to shape our pupils' attitude toward themselves and their world. Meanings can be rich or thin, shallow and superficial, or profound and pure, depending on how we use words in our classrooms. The word "policeman" for example can be a symbol for respected authority, can stand for an object of contempt, or be a synonym for the word "friend," depending on how we use the word and the part it plays in our teaching. Words become flesh in our hands.

Part of the Christian school teacher's task is to so use language that Christian meanings are made explicit. Some words we use are common to all men (e.g., love); some are peculiar to Christianity (e.g., providence), but both can and do have specifically and distinctively Christian meanings. Without deliberate and explicit enrichment of words with these meanings our teaching becomes secular. The less difference there is between the terminology we use to label experience and the way it is done in other systems, the less actual difference there is between our teaching and secular teaching.

The public school, we often assert, is secular. If by this we mean that most textbooks



\*The cover of the December, 1964, issue of READ--an American Education Publication, copyright 1964 by Wesleyan University, Middletown, Conn., reproduced by permission.

us about how easy it is to be secular in our teaching. The term "joy" is a common word, but one into which many meanings can be poured. Its peculiarly Christian meaning derives from that great event which we commemorate in this season, the event in which the Word became flesh and dwelt among us. Without this dimension the term is robbed of its central meaning, leaving but hollow husks on which the child can feed.

The almost complete absence here of specifically Christian terms and symbols in describing "joy" is at once both humorous and pa-

thetic. The definition is humorous because of its cleverness in both language and symbol; it is pathetic because of the impoverishment of meaning which it produces. All the resources of art work and of clever wording are here employed to teach a de-Christianized meaning of Christmas joy.

It is not for us simply to decry secularization in American education. It is rather for us here, in this Christmas season, to rededicate ourselves to the task of so living and speaking that in Christian schools, at least, our pupils shall not only have joy, but that their joy may be complete. D. O.

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#### GUEST EDITORIAL:

## ECUMENICAL EYES

—Frederick Nohl\*

#### EDITOR'S NOTE:

Coming hard on the heels of my "Remedy for Myopia" (Fall, 1965 issue) comes this further challenge to look beyond our own confines. Written by a Lutheran educator, the following guest editorial invites us to be ecumenical enough to learn from other systems of Christian education. It may well be possible that this journal can bring to the attention of its readers not only the presence of other journals dedicated to the cause of Christian schools, but also summaries and reprints from them. This editorial is a responsible statement of the need of the first step. D. O.

\* \* \*

The Christian school movement, like the American church, remains fragmented. True, occasionally we learn of a promising intergroup meeting here and a small cooperative effort there.

For all practical purposes, however, Christian schoolmen continue to move in their own exclusive denominational and associational circles. And if they do reach outward, it is usually toward the public school brother, not

toward the brother caught up in the Christian school cause.

There are reasons for this, of course. In a nation which makes the public school the measure of all things educational, the Christian schoolman has little choice but to seek an accommodation with Big Brother.

Seldom, however, is there a comparable pressure to seek cooperation with those of another fellowship whose commitment to Christian schools is no less deep than ours. So we Christian schoolmen continue to take the easy way out, keeping company only with those whom we know well, with those whom we can trust to speak a familiar language, share a common tradition, or follow a hallowed practice.

Hopefully this exclusiveness will someday be seen for what it really is--an expensive luxury which Christian schoolmen can ill afford. For the price of exclusiveness is all too often a narrow view of educational life, comfortably tunneling its way down the same old corridors.

There is, unfortunately, no single remedy to cure tunnel-visioned exclusivism. Converting to responsible ecumenical eyes is for many Christian educators a long, involved, and even painful process.

It has been--and still is--for me, I know. But not all the medication is bitter. Among the more pleasant is that which requires subscribing to the journals published by the several Christian school groups. By reading these regularly, I've begun to experience the replacement of

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\*Mr. Frederick Nohl is the editor of school materials, Board of Parish Education, The Lutheran Church--Missouri Synod, St. Louis, Missouri.



blindness with light, suspicion with trust, and antipathy with affinity.

Maybe you will, too. Let me, therefore, end these ecumenical urgings by encouraging your institutional or individual subscriptions to the following:

The Catholic School Journal. Monthly, September to June. \$4.00. The Bruce Publishing Co., 400 N. Broadway, Milwaukee, Wis. 53201

The Christian Home and School. Monthly, September to July. \$2.00. National Union of Christian Schools, 865 Twenty-eighth St. S. E., Grand Rapids, Mich. 49508

The Christian School. Bimonthly. Mimeographed. No price given. Association of Mennonite Elementary Schools, Eastern Mennonite College, Harrisonburg, Va. 22801

The Christian Teacher. Quarterly. \$3.00. National Association of Christian

Schools, P.O. Box 28, Wheaton, Ill. 60188

The Journal of True Education. Bimonthly, October to June. \$2.50. Department of Education, General Conference of Seventh-day Adventists, 6840 Eastern Ave. N. W., Tacoma Park, Washington, D. C. 20012

Lutheran Education. Monthly, September to June. \$3.50. Concordia Publishing House, 3558 S. Jefferson Ave., St. Louis, Mo. 63118 (The Lutheran Church--Missouri Synod)

The Lutheran Educator. October, December, February, and May. \$1.00. Board of Education, Wisconsin Evangelical Lutheran Synod, 3512 W. North Ave., Milwaukee, Wis. 53208

Lutheran Teacher. Monthly. \$1.75. Augsburg Publishing House, 426 S. Fifth St., Minneapolis, Minn. 55415. (The American Lutheran Church)

# # # #

# NOTES TOWARD A CHRISTIAN DEFINITION OF EXCELLENCE

—Steve J. Van Der Weele\*

Not just any definition or description of the term excellence--the term in wide use currently to denote quality in education--can serve as blueprint and ideal of Christian education. Neither Greek nor modern versions of the sheerly disciplined intellect, nor the mere accumulation of information, nor yet the goal of satisfactory articulation with the processes of today's world can serve to undergird a Christian view of education. It is not that these or even other versions of excellence are altogether excluded. But the whole matter of excellence is not that simple. Let us consider the com-

plex of qualities that go into the making of an ideal Christian student.

The notion of excellence, obviously, assumes a range of quality of competence, of character, of quality, of service. When we say that a deed has been done in an excellent way we mean that the doer has not been content with the merely acceptable or mediocre, but that he

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\*Steve J. Van Der Weele, Ph.D., University of Wisconsin, is professor of English at Calvin College, Grand Rapids, Michigan.

has gone beyond the minimum demands and has done it surpassingly well. Similarly, a person of excellent character is one who is more than a bundle of instincts and responses, a mere pleasure-seeking instrument; he is one who has deliberately reflected on ends and their relationship to means, and has embarked on a course of life which is purposeful, disciplined, and exacting. Obviously, the term does not relate to all of our experiences and enterprises, but only to those areas and to those levels of consciousness where we are free and able to make choices.

What does this all mean in practical terms? It means, I should think, that all the resources of education--formal and informal--church, school, home, and community--should be placed at the disposal of the youngster to help him attain to maturity--physical, social, intellectual, and, above all, spiritual. It means that we teach him already at a very early age--always at his level of awareness, of course--to live safely, responsibly, enjoyably. It means that as he grows older we begin, through precept and deed, through attitude and example, to introduce him to the larger world and the rules by which it ideally operates. More specifically, excellence implies a series of values and principles such as the following:

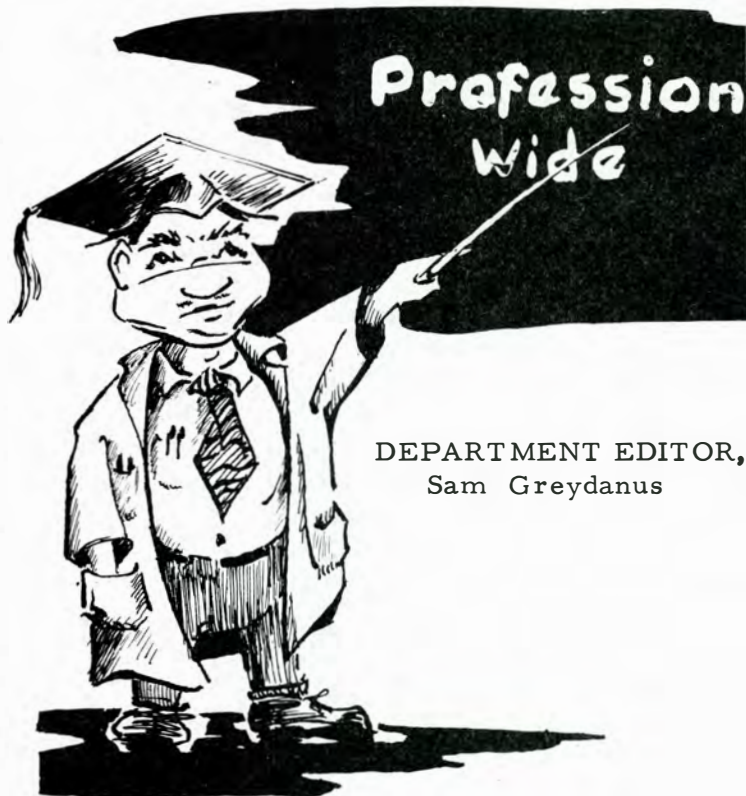
--We must teach the child the importance of craftsmanship, of skill, of thoroughness.

--We must nourish and help him maintain a wholesome curiosity. There is room for a wholesome amateurism in life. Let the child set up problems for himself and work out solutions to them.

--We must teach the child a sense of proportion. I once had a student who regularly spent between fifteen and twenty hours on a theme. I told him this was regrettable. He was a perfectionist in an unwholesome sense. I reminded him that he would never achieve perfection, and that the law of diminishing returns had surely set in long before twenty hours. Let me cite another example. Samuel Johnson and a friend were traveling down the Thames River one day, being rowed by a lad who was compelled to make his livelihood by rowing passengers. The two struck up a conversation with the lad, and having ascertained that he had had practically no formal education, Johnson asked him, "What would you give to be able to read and write?" The lad replied without hesitation, "Sir, I would give all that I own." Would our children appreciate the force of this reply? We must prevent what has happened all

too frequently--a situation where we know the price of everything and the value of nothing. In other words, our children must understand that proper integration requires that we arrange our various loves and loyalties in the right order.

--We must help the child to maintain a healthy tension between conformity and creativity. He must be taught not to do things merely as a matter of course. He should be able to



adduce other reasons for what he does and chooses than merely "Everyone is doing it." He should not be so stifled by organization that he can no longer do creative work.

--We must do what we can to help the child locate himself in space and in time; we must give him a notion of the political and social trends which have gone into making him what he is. We must give him a sense of his spiritual longitude and latitude so that he can better understand his world and his antecedents. It seems important, for example, that we tell the child, at an appropriate age, of the dual strains on the Christian Reformed tradition--the pietistic movement of the early nineteenth century, and the more intellectual and cultural group which joined the earlier one later. Just as these groups were able, at their best, to maintain a kind of equilibrium in the Netherlands, so we must accept the facts and try to achieve the same kind of maturity among ourselves in our country.

--We must teach the youngster to take other people seriously. We must teach him



that they are not to be regarded as mere images, as unreal creatures who must be avoided or exploited for our own ends. We must show him the difference that love makes in our treatment of people--helping our neighbor to suppress what God wishes to have suppressed and to elicit what God wishes to have elicited.

--We must help the child--again, at a level appropriate to his maturity--to transcend some of the very rigid assumptions of our world. I am thinking, for example, of the premium often placed on athletics, a situation which distorts the true importance of games and sports and makes athletics an end in itself.

--We must help the child quarrel with definition of man that is fashioned with such intensity by the mass media: the notion that man is primarily a consumer, a person who must continually be gratified, flattered and cajoled. We must help the child to be critical of some of the standard formulas of American life. We must teach him the limitations and futility of living only for security, conformity, and comfort. The professions and positions that go begging are those which require a measure of sacrifice and dedication, and which require a break with the going and accepted criteria of success in our day.

--We must teach our children the meaning of self-effacement and self-denial, and hold before them perpetually the gospel as exemplified in Christ's washing the disciples' feet.

--We must teach the child to attain to maturity by respecting truth, by submitting himself to reality. We must teach him to love God and then to follow the facts wherever they lead. And, of course, our children must observe from us that we have the courage to do so.

--We must do what we can to discourage the child from dissipating his energies and gifts in frivolous or merely attention-getting activities. We must teach him, rather, great meanings, great objectives, great convictions, so that he will not be content with shallow and trivial ones.

--We must teach the child what it means to live in community. And since most of our children will spend their lives and fulfill their destinies in cities, the most mature of civilized achievements (at their best), we must help them to employ the resources that cities can offer

without being oppressed or overwhelmed by urban pressures.

--We must teach the child to recognize and avoid the vulgarity of modern life. And a point closely related to this is that we must teach him to observe the amenities of civilized life. Manners, after all, are the blossoming of morals, and are one more area in which we vindicate our humanity and witness to man's inherent dignity.

And, of course, academic proficiency is important. Who does not appreciate the magnificence of a mind honed to the sharpness of a razor's edge? Although we must help the students avoid College Boards neurosis, it is right that we maintain pressure--comfortable but persistent. For if we are honest with ourselves, we must admit that we have more in us than we know and in fact achieve.

--Finally, we must help the child to confront God in a personal way. This must be done in a way which avoids the perils of legalism and sheer moralism. The child must be taught to behold God in his holiness and grace. And then we must help the child to respond with religious warmth and ethical seriousness.

I trust that it has become apparent by now that excellence is a complex virtue. It is, in fact, a composite virtue--a blend of gift and initiative, of ability and motivation, of aptitude fused with zeal. By itself, excellence is an abstraction. It must be channelled into meaningful ends and noble goals. It will not come about spontaneously, in an unreflective mind or an unreflective community. But the end is a magnificent one--to fashion the man for God, thoroughly furnished unto every good work.

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"Whereas the humanities are rooted in optimism, rational inquiry, and commitment to man; the inhumanities are characterized by opportunism, rationalization, and commitment to oneself."

# #

THE CONDESCENSION COMPLEX: "The liberal arts people look with jaundiced eye on the education departments; post-graduate faculties look down on undergraduate staffs, who look down on high school instructors, who look down on junior high school teachers, who look down on those who staff our elementary schools."



# COFFEE CUP CONVERSATION



THEN JOHNNY PULLED  
THIS THING OUT  
OF THE BOX . . .



I HAVE NO  
DISCIPLINE  
PROBLEMS!



# SCIENCE- MATH

Department editor,  
Roger Bratt

A substantial part of the academic year is devoted to testing and subsequent evaluation of the progress of students. Since testing occupies a significant position in any educational program, we do well to pause and to analyze our methods and philosophy of testing. Reevaluation of testing in the area of science becomes the more imperative when one takes cognizance of the curricular revisions being made there. It is hoped that Mr. Poppema's article will

stimulate thought and discussion about testing in science.

A second article on this issue deals with the scientific method and its implications for Christian science education. Should teachers use an investigative or a descriptive approach in science teaching? Mr. Bengelink draws on his wide experience as a science educator to present his views on this matter.

## TESTING IN SCIENCE

—Marvin Poppema \*

New educational trends and philosophies on curriculum are becoming increasingly noticeable. Educators are busy writing about the need of revising curricula to meet the demands of this fast-moving, technical age. This is particularly true in the sciences. Since the advent of Sputnik, science teaching has taken on an entirely new look. Textbooks are being rewritten with a new emphasis, teachers are being trained in new approaches, veteran teachers

must change their style of teaching, and the science laboratory no longer has any resemblance to those of just a few years back. The emphasis has shifted from the "listen and learn" idea to more of "think and do" approach. The big three of science--biology, chemistry, and physics--all have new versions and approaches to the study of their respective disciplines.

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\*Marvin Poppema, A.B. Calvin College, M.S. University of Michigan, is an instructor of biology and physiology at Holland Christian High School, Holland, Michigan.

The knowledge explosion resulting from the tremendous advances in research and technology has created some interesting but bothersome problems. One of these is the matter of testing. What is the status of testing in science



courses today and how is it affected by modern attitudes?

### HOW DO WE DEFINE A TEST?

There are many opinions as to what constitutes a test. Some people, including both students and teachers, even question the advisability of giving any tests. Whether student or teacher, one can generally agree with the Webster's Collegiate definition: "any series of questions or exercises, or other means of measuring the skill, knowledge, intelligence, capacities, or aptitudes of an individual or group." This is a broad, very inclusive definition. Rarely would any of our tests need to fill all of these attributes at once, nor would an occasion requiring that present itself very often.

### WHY HAVE TESTS?

Teachers and students alike tend to regard a test as a measuring device, some kind of yardstick, used to indicate one or all of several things. First of all, a test can be an indicator of a student's degree of attention and diligence to his work. How thoroughly and carefully he approaches the test will generally tell how he approaches his work. Second, a test is used to show a student's powers of recall and his ability to memorize selected, itemized facts, and then be able to parrot them all back again in satisfactory fashion. Third, a test can be used to measure the student's ability to relate and apply principles and concepts. Fourth, and unfortunately, there is the somewhat defeatist attitude or objective of merely providing a means to an end--a grade in the course.

### BUILDING A TEST

There are two things, I think, that should be kept in mind in building a test. First, the teacher should have firmly fixed just what he hopes to accomplish with a particular test. Second, he should not forget that the attitude of the student will play a large part in determining the results he desires.

Let's look at the latter first. What does the student think of an approaching test? The point I wish to make is that the tests are an important, if not the most important, determiner of a student's approach to the learning process. He will think of grades resulting from tests as rewards for his efforts. Very often this is the

prime thought of the student, regardless of the objectives a teacher may have for the course. He will act accordingly, regardless of the subject matter involved. I think all of us tend to prepare ourselves on the basis of what we expect a test or contest to be like. Objective tests call for a different type of preparation than do subjective, essay-type tests.

Let's get back now to the teacher's reasons or objectives in building the test. Traditional biology teaching is of a highly descriptive nature. This lends itself very easily to the objective type of testing. Most textbook publishers make such tests available. Teachers very often prefer this type, though they do not willingly admit it sometimes. In a busy schedule, they make for much easier and faster grading. Then too, if the objectives of the course include committing to memory as many as possible of a multitude of facts and descriptions, this is the test to use. On the other hand, the modern approach to science teaching shifts the emphasis over to the discussion-reasoning type of testing. This idea is based on the fact that the knowledge explosion makes it impossible for the student to learn all the facts in a discipline and that basic concepts and principles should be emphasized instead. This means that the subjective type of test must be used more. There are mixed emotions on this. These tests are not only harder to construct but they also require painstaking work in grading them. Humanly speaking, one can hardly blame a teacher for shying away from these at times.

### THINKING VERSUS MEMORY

The majority of students seem to prefer the objective types of tests. One reason seems to be that they feel memorizing is easier than thinking, that on these tests you don't have to think, and also that the law of averages is in their favor for guessing. This becomes a very important crutch for them. Ask them to discuss and they throw up their hands in horror. This type of test also fits into their pattern of study habits. Their chief concern is to get the grade. To make matters worse, they will wait until the night before the test and cram furiously, then proceed to forget most of the material within the next twenty-four hours. (At this particular point we could veer off on a discussion of what to do about student's study habits. Some work is badly needed in this area.)

If an objective test is greeted with subdued shouts of glee and sighs of relief, then

just as surely is the subjective test going to be met with moans of anguish and despair. Here and there you will notice a few knowing smiles and a few understanding grins. A certain amount of discussion is called for in this type of test. Herein lies both a danger and a hidden blessing. A student who is a little weak on substance of the subject matter may welcome a chance to "string a line." This may give him a sense of false security as he tries to bluff his way out. On the other hand, some students who may not have a handy command of point-blank facts may be able to express themselves much better when they can construct an answer in their own words. This type of testing often leads a student to "think on his feet." It emphasizes the need to be able to take known facts and principles and apply them to new situations and problems, as well as being able to discuss something which is old and established fact. A fellow student of mine in graduate school complained that objective tests did not test his intelligence, but merely checked his ability to memorize and recall. I feel that he had a very good point.

#### NOW IS THE TIME TO MAKE A CHOICE

Personally, I think it is not so much choosing one basic type of test over the other as it is using one that may take in both ideas, as long as it satisfies the objectives for which it was made. There are values worth working with in each. I don't see how we can do without some objective testing. Worthwhile concepts and principles are impossible without solid factual information on which to base them. We must be careful, though, not to make informational robots out of our students. The same degree of caution should be applied on the other method.

My approach has been oriented so far from the point of view of biology. However, I think

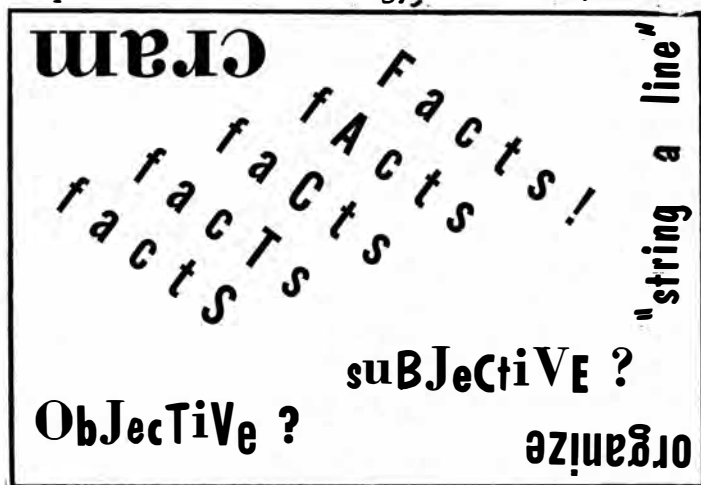
my colleagues in chemistry and physics find themselves facing the same problem. Their fields are also being subjected to changing emphasis. The position taken in biology is quite representative of all three, I believe. There are two broad aims built into the BSCS curriculum, namely, a substantive course content and the process of enquiry. Four kinds of outcomes are then suggested to be relevant to this process of testing. They are:

1. The ability to recall information and to make minor reorganizations of materials learned.
2. The ability to show relations between different bodies of knowledge learned at different times or in connection with different topics.
3. Understanding of materials learned as demonstrated by the ability to apply knowledge in new situations.
4. The ability to use skills involved in an understanding of scientific problems.

I realize that each of these is in itself a subject for fairly lengthy discussion. To many of us they may seem to be a little too idealistic, but I might add, so did the entire Biological Sciences Curriculum Study program until we tried it. It is also true that classroom situations, such as student grouping, will vary. Sometimes a teacher's preparation and training will cause differences in approach and attitude. Above all these ideas and concepts lies one important question--What kind of person, in the eyes of God, do we want our students to become?

#### HONEST EVALUATION

I have stated previously that I find value in both types of testing. Both can be used profitably under proper conditions. However, I wish to caution against careless use of the objective type of testing. I've pointed out how easily students get into the recall rut and how their study habits may deteriorate into mechanical force-feeding. For the most part, objective tests call for taking in, memorizing, and then regurgitating a lot of words and figures. This bothers me. Very frankly, an animal can be trained to do this type of thing too! This does nothing for man as an expression of the image of God. When man also learns to relate facts, develop concepts, to reason out the intricacies of God's revelation, then he begins to





function in full Christian stature. Man has been endowed with wisdom far beyond that of any other creature. "I am fearfully and wonderfully made" says the Psalmist in Psalm 139:14. Again, David says in Psalm 8:5, "For Thou hast made him a little lower than God, and hast crowned him with honor and glory". What a challenge there exists for us! Though the ultimate motives of the BSCS may be different from ours, I think they have the right approach. They are headed in the direction of broader understanding. To do this with God's revelation is the prime motive of any Christian student

worthy of the name. The more we see and know of the handiwork of our God, the more we can and must say, "Truly God is great, and greatly to be praised." This is our obligation. There is a finer way of praising God. That is to study, to reason, to question, to relate with all our faculties, heart and soul, and mind showing then the whole man of God, a revelation of Himself. That must be the goal of our teaching. Our testing then must be a measurement of how well we are helping our students to achieve this goal.

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# The High School Biology Teacher and the Scientific Method

—Henry Bengelink\*

## WHAT IS SCIENCE?

What is science? Whose definition shall we use? According to W. C. Dampier "Science is ordered knowledge of natural phenomena and of the relations between them." Charles Singer, an historian of medicine, says, "Science is the process which makes knowledge." In their text General Zoology, Dr. Tracy Storer and Dr. Robert Usinger tell us that "science is exact knowledge or tested and verified human experience." Dr. A. M. Elliott says, "Science is actually a systematic approach to the solution of problems. It involves observation, the collection of facts, and the drawing of verifiable conclusions based on these facts. Science has come to mean organized knowledge which includes all that man has learned about his world."

Looking at these definitions we find at least three ideas represented. Science is organized knowledge; it is a process that leads to the acquiring of organized knowledge; it includes both of these aspects. The one view might be considered the more conservative while the other is the more progressive. At least, both are important aspects of the field of science. Science is not to be equated with the scientific method, although science does gain its knowledge by means of the scientific method. Science is the study of the systematized knowledge concerning the created uni-

verse. It uses the scientific method in discovering this knowledge.

## THE SCIENTIFIC METHOD

Everyone who reads these pages knows what is meant by the scientific method; however, not everyone would agree on its definition. It is a method of solving problems and involves observation and experimentation. I feel that recent emphasis tends to stress the latter and include observation primarily as it involves experimentation. I would rather agree with Dr. Karl A. Stiles from Michigan State University when he says, "The scientific method is not limited to experimental procedure; on the contrary, observation rather than experimentation should probably be considered the basis of science, hence of the scientific method." Dr. Paul Weisz, in his Elements of Biology, tells us, "All science begins with observation, the first step of the scientific method."

I realize that many of today's biology teachers would not admit to neglecting the ob-

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\*Henry Bengelink, A.B. Calvin College, A.M. Univ. of Michigan, is assistant professor of biology at Calvin College. He has also taught at Oakdale and Baldwin Christian junior highs, as well as Holland Christian High.

servation aspect as such, but it seems to me that the stress on the experimental approach suggests that those fields in biology which do not investigate by means of experiment are really "not with it" in modern education. I have no axe to grind with those who emphasize experimentation at the high school level; however, I do not agree with the implication that this is the only approach worth considering. When I speak of experimentation emphasis at the high school level, I, of course, am thinking of the B.S.C.S. program in particular.

### FACTS, CONCEPTS, AND PRINCIPLES

When I read that the teaching of biology in the secondary schools has emphasized facts, concepts, and principles, I must agree. I do not agree that this has been one of its major faults. Yes, there are many facts to be learned in the study of biology, but these are related facts and must be understood in developing concepts and principles. Why is it that along with the emphasis on the experimental method one so frequently finds a complaint about the learning of facts and details? I fear that many students are getting the impression that facts are unimportant in science, and, as a consequence, those who later go to college have never learned to study seriously. Their attitude often seems to be, "We'll get the general idea, but don't expect us to learn the solid, factual material."

When does a fact become a mere detail? I prefer to call these "specifics" and, after all, concepts and principles are developed from specifics. The fact that insects have six legs may be considered a detail by some, but it does set apart some 700,000 (more or less) kinds of animals from all other kinds, and these insects have significant influence upon our lives in many ways. No other kind of animal has six legs. Whether this is a detail or not depends upon its significance in the classification of living organisms. Surely a taxonomist would not consider this fact an unimportant detail. Peculiarly, those teachers who have no use for such details or specifics usually do not hesitate to describe the detailed intricacies of D. N. A. or cell metabolism which might well be considered too much detail by a fellow biology teacher.

### B.S.C.S. BIOLOGY

I am gratified to see that the authors of the yellow version of the B. S.C.S. biology text evidently feel this way too because when I page through the text, I find it quite complete--with

many facts, concepts and principles. I am sure that those who use the text find it satisfactory and really not too different from some conventional textbooks. The greater emphasis on the history of the development of scientific ideas is a good one, but this approach has been the method used by many biology teachers in the past. Just recently a high school biology teacher remarked, "I feel that I've always taught B. S. C.S. biology!"

We do not need to revolutionize our methods in the teaching of secondary school biology. The good teacher will continue to explain, describe, discuss, demonstrate, question, encourage student participation--in fact, use any method in class to interest the student and motivate him to further study in the field. And I would suggest that we continue to stress specifics with an eye to the understanding of concepts and principles.

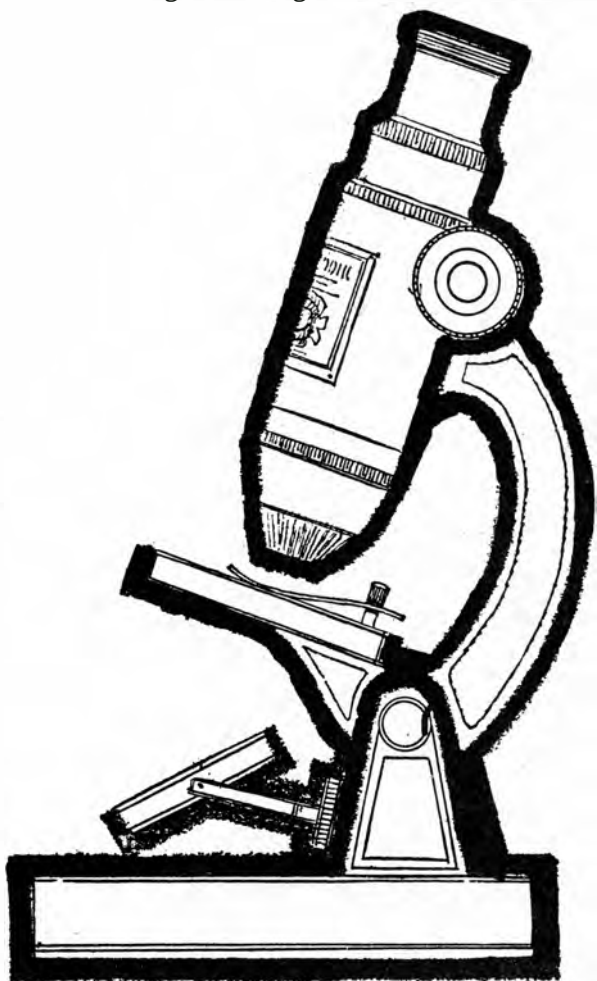
### OBSERVATION AND EXPERIMENTATION

Experimentation is an important aspect of laboratory work in the teaching of biology, but in my opinion it is emphasized at the expense of observation and verification as they may be carried on apart from experiment. True, such science fields as physiology, chemistry, cell biology, genetics, and others are in their very nature inclined to be experimental. On the other hand, observation and verification, apart from experimentation, have played the major role in the development of such sciences as astronomy, geology, anatomy, and taxonomy. Very likely in the past many biology teachers have made too much of the memorizing of cold, unrelated facts, but I feel that now the pendulum is swinging too far to the other extreme. In the laboratory block on complementarity of structure and function in the yellow version, structure is brought in only incidentally and in one place relative to the frog, the authors admit, "This, of course, assumes you have by now picked up enough anatomy to recognize the stomach." This helps to give some idea as to emphasis placed upon vertebrate anatomy investigation. I believe that the high school student must be made aware of the fact that both are legitimate methods of investigation. Observing and verifying the description of the differentiating characteristics of a group of animals, the structure of a root, or the arrangement of the organs in a crayfish along with an understanding of their function is a rewarding and essential activity for the student in a biology laboratory. High school biology is intended to be of significant value for all high school stu-



dents. They should be given sufficient opportunity to become acquainted with the way a scientist works. Surely they must also become familiar with the concepts and principles which this method has uncovered over the years, and much of this can be done apart from performing the actual experiment. Very few of these students are likely to spend their lives as research biologists. This is not an either-or proposition; we must have observation and experimentation in the laboratory and description in the classroom.

When the teachers' handbook to accompany the B.S.C.S. texts complains that conventional textbooks follow the "rhetoric of conclusions", i.e., that they make positive statements concerning conclusions of science, I can only agree that this is what they often do. Surely biologists in the past have not worked entirely in vain and many of their conclusions are valid! The text then argues that this approach gives the student the false impression that "science consists of unalterable, fixed truths...that science is complete." I feel that one way to overcome this difficulty is that which has been followed in the B.S.C.S. program, by developing in the student the sense of inquiry leading to investigation and experimentation. However, this is not the only way. I am convinced that a good teacher can also during the regular class discussion guide



the students to see that not all the answers are in, many of what we now call answers are really incomplete, and there are many problems remaining to be solved in the future. This is an open-minded attitude toward present day biological knowledge and investigation that a teacher should also seek to develop during the class discussion where attitudes are being developed as well as in laboratory experience. Among the aims a biology teacher should keep in mind are the following: to develop a sense of the scientific method in the study of the field; to develop an understanding of the main concepts and principles which help to explain the activities of living organisms, to develop an interest in the science of biology which will motivate the student to further study in this field; to train the student to develop habits of thorough study which will be of benefit to him in whatever scientific endeavors he later becomes active.

### A CHRISTIAN EMPHASIS

One of the traits ascribed to him who follows the scientific method is that he is unprejudiced and unbiased. He is supposed to attack a problem without having any pre-conceived opinions. In practice this is impossible. The very hypothesis he formulates at the outset already sets a bias to his thinking. He certainly begins with the pre-suppositions that the laws of nature are constant; else there is no sense in his attempting to use these laws in working out a solution to his problem. The biology student should be reminded frequently that as Christians we do have preconceived opinions and biases, and these are bound to influence our interpretation of the data we collect by way of the scientific method. The Christian high school biology teacher should attempt to develop in his students a constant awareness of our distinctive interpretation.

In teaching biology, or science of any kind, we have a splendid opportunity to show the student that there are at least two ways of learning truth. The one he is practicing in the laboratory and also at many other times is the scientific method. It is a valid and highly satisfactory method of getting to know about certain things, but we must remember that it can teach us only concerning the physical universe, that which can be investigated by means of observation and experiment.

Our students must recognize that the Christian has another source of truth in the

Word of God, concerning which the scientific method can say nothing. Many of the most important things we know to be true are those we believe in faith. Our belief in God as Creator and Sustainer, Jesus as Savior, the resurrection, eternal life, and so forth, obviously cannot be tested by observation or experiment. Yet, these we know to be true. "Now faith is the substance of things hoped for, the evidence of things not seen." Our students must not get the impression, as has happened on occasion, that what cannot be seen need not be accepted as truth.

I am reminded of Apostle Thomas who was so intent on using the scientific method when he said, "Except I shall see in his hands the print of the nails, and put my finger into the print of the nails, and thrust my hand into his side, I will not believe." But Jesus was sharp in his rebuke when he replied, "Thomas, because thou hast seen me, thou hast believed; blessed are they that have not seen, and yet have believed."

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Dear Editor,

In his article "The Christian Teacher and Evolutionism" (Fall 1965 C. E. J.), Reverend Leonard Verduin maintains an unbiblical position as follows:

But has not the Fall had a sinister effect upon the pages of this book of nature? The answer to this question must be negative. God's revelation in nature has not been distorted and rendered less than trustworthy. Such distortion as there is must be located in the reader and not in the

read. The record is as good as it ever was; the effect of the Fall is observable in the eye and the mind of him who read it, not in the text of this 'book' (nature). (p. 24)

Rev. Verduin presents the effect of the Fall in nature as merely subjective, dependent on the observer. But God tells us in Genesis 3:17-18: "Cursed is the ground for thy sake; in sorrow shalt thou eat of it all the days of thy life; thorns and thistles shall it bring forth to thee"; and in Genesis 5:29, we read this: "And he (Lamech) called his name Noah, saying, 'This same shall comfort us concerning our work and toil of our hands, because of the ground which the Lord hath cursed.'" Moreover, God tells us in Romans 8:22; "For we know that the whole creation groaneth and travaileth in pain together until now."

Certainly God reveals Himself sufficiently through a fallen creation so that unbelieving men are without excuse (Romans 1:19-21); certainly man's perception and intellect are distorted by his depravity; certainly the record of nature is trustworthy, for it clearly shows His eternal power and Godhead; but nature also clearly and trustworthily reveals the perverting effect of sin on God's creation--now under His curse (weeds, disease, birth pain).

Therefore, we must accept the biblical and evident truth--and this Rev. Verduin denies--that the effect of the Fall on what is "read", on the book of nature, is a tragic reality; that nature is no longer perfect.

All creation--with God's elect--awaits redemptive renewal in Jesus Christ.

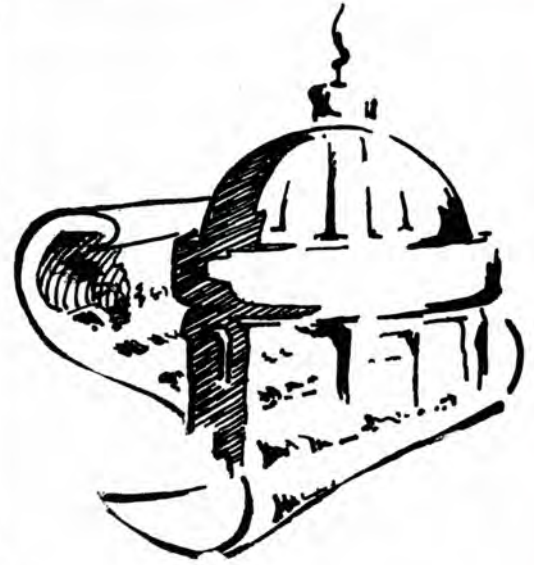
Sincerely,  
Merle Meeter  
Dordt College  
Sioux Center, Iowa





# SOCIAL SCIENCES

Herm Beukema,  
Department Editor



Bible Doctrine  
in the High School -- it Depends

or

THEOLOGIZING a function  
of the day school ?

or

Peeking in Berkhof is "Cheating" —Marion Snapper\*

The senior high school course in Bible Doctrine is the Bible course which can most satisfactorily be defended as a proper concern of the day school.

This assertion flies in the face of a considerable body of opinion which would hold just the opposite, namely, that this is the one course which most clearly conflicts with the task of the

church. But the difference in opinion is based principally on a difference in understanding of what a course in Bible doctrine in the day school consists of.

## DETERMINING ITS LEGITIMACY

Two tests may be applied to determine the legitimacy of a subject in the curriculum of the day school. First, is there anything that inheres in the nature of the institution which dictates what its most proper function is? Se-

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\*Dr. Marion Snapper, A.B., M.A. Western Washington, Ph.D. Univ. of Calif., is associate professor of education at Calvin College.

condly, since the school is an extension of the home, it assumes those tasks which the home is unable to do itself and must therefore delegate. Generally, those tasks assigned to the school for this reason are those which require expertness, and systematic tutorial supervision.

The first test deals directly with the conflicting claims of the church and the school. Clearly the burden of proof rests with the day school to establish a case for teaching Bible doctrine. I seriously doubt that such a case can be made apart from application of the second test. What part of the religious education of a child does the parent find both himself and the church incapable of doing because it requires expertness and systematic tutorial supervision?

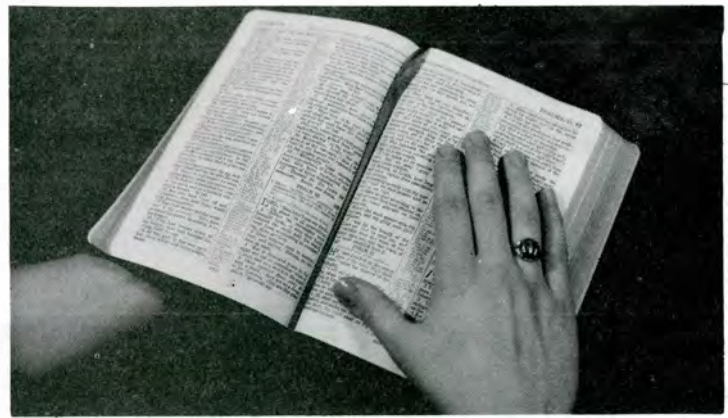
Teaching a student to theologize, to do theology, requires such expertness and supervision as the church and home cannot presently provide. A distinction with pedagogical implications is implied here. Theology can be taught primarily as end product or it can be taught primarily as process. The Heidelberg Catechism is the end product of the theologizing of Ursinus and Olevienus. Berkhof's Systematic Theology is the end product of the process of Berkhof's theologizing. Catechetical instruction in the church is admittedly a teaching of the end product of theologizing. The church teaches its catechumens the confessional creeds and doctrines (end products) of the church. It is a preparation for informed membership. But the church does not teach its students the process of theology.

Thus, if a course in Christian doctrine is to be legitimate in the school, it must be principally a course in the doing of theology by the student himself. This is the part of theology that is beyond the resources of home and church. To understand in more detail why this is so, it is necessary to examine what is involved in the doing of theology.

#### REQUIREMENTS FOR "DOING THEOLOGY"

Charles Hodge devotes the first 188 pages of his three-volume work, Systematic Theology to the method of theology as a science. He says,

The Bible is no more a system of theology, than nature is a system of chemistry or mechanics. We find in nature the facts which the chemist has to



examine, and from them to ascertain the laws by which they are determined. So the Bible contains the truths which the theologian has to collect, authenticate, arrange, and exhibit in their internal relation to each other. (Vol. 1, page 1).

Some of the rules which guide the theologian in dealing with the truths he discovers in the Bible are:

1. Collection is made with diligence and care.
2. Collection of facts is comprehensive, and if possible, exhaustive.
3. Honesty; never suppressing, distorting, or concealing. The conclusions must embrace the facts, and all of them, in their integrity.
4. The principles are derived from the facts, and not impressed upon them; exegesis, not eisegesis.

How shall we know whether or not a teacher is teaching his students the process of theologizing (and, not incidentally, a lot of theology)? Let him ask these questions about his course:

1. Is the Bible the most worn textbook at the end of the course?
2. Is the instructor devoting class time to teaching the student how to read, to answer the question, "What does it really say?" to be sensitive to the problems of Isagogics (study of books) and Hermeneutics (interpretation) in this relationship? Is the student using the tools available to him such as concordances, work studies, commentaries?
3. How are the books on Systematic Theology used? Do they tend to become "an-



swer books", used primarily to check on the validity of the students' conclusions based on their own theologizing?

4. Is the idea of covering all of the loci of doctrine with equal intensity abandoned in favor of going in depth at selected points? (The church will take care of covering the loci.)

5. Is the student exercised in the difficult problems associated with making inferences from a body of facts gleaned from different part of the Bible?

6. Is evaluation (grading) based primarily on the student's work in doing theology?

7. What would an observer coming into the classroom find the students and the teacher doing most of the time? Are the students sitting with Bibles open, surrounded by commentaries and other tools? Is the teacher moving around helping them individually as they struggle with the complex problems of ferreting out theology from the Bible, or is he lecturing on doctrinal conclusions of his own or someone else's theologizing?

When questioned, high school graduates, with some notable exceptions, report that they

themselves were not engaged in the process of theologizing as here briefly described. It is likely that many teachers think they do this, and likely engage in it themselves, but the students do not in fact do it. And evidently there are a few teachers who actually engage their students in theologizing. The students who report having done theology this way are without exception enthusiastic. The others, upon being made aware of the process of theologizing, tend to respond, "Hey, we were gyped."

### ANTICIPATING OBJECTIONS

Certain questions may be anticipated:

Are the Bible teachers in our high school qualified to teach in this manner? An expertness beyond that required in the conventional approach is called for. It can be learned. But is there a college course which requires him to do this?

Is there not an increased danger of heterodoxy? Certainly not. In fact, there would be less. The difference would be that heterodoxy would be out in the open. The present system conceals it behind verbal assent to theological propositions reproduced but not half understood.

Can the layman do this? The Reformation said resoundingly, "Yes." But he does need help.

Is this not a waste of time? After all, theologians have done the job for us. No, it is not a waste of time. There is no shortcut to genuine learning. The work of the theologians will be more appreciated and will be found as necessary reading by the student instead of required reading. For example, a student might "cheat" on his assignment by consulting Berkhof before he is finished. What a delightful prospect!

Can the church or the home do this kind of teaching? Emphatically not. It is far beyond their resources, requiring day-in-day-out tutorial supervision.

The home relates doctrine to life. The church teaches the doctrinal conclusions of Reformed theologians. The secondary school teaches the process of theologizing. Not exclusively in any case, but predominantly, because the functions inhere in the nature of the institutions. And all three aspects need doing.





*Department editor,  
Vernon Boerman*

It was a year ago (1964 fall issue of CEJ) that the "Ban the Band" article appeared. It has gotten a lot of mileage since then, both favorable and unfavorable, both spoken and written. A Michigander has just written me that the Grand Rapids Press recently used the article as a take-off for a critique of city high school bands. Two recent letters with keep-the-band-in-our-school-system sentiments are printed in this department. V.B.

know what I am trying to accomplish and God forgive me all my shortcomings.

When is the last time our critic has attended a concert of a fine band, or a rehearsal for that matter? Is he aware that bands play great music? Listen to the fine transcriptions from orchestral literature, and the new, fine, original band works being written by some of this age's greatest composers. To label band as neither "Christian nor education" reveals a most glaring lack of understanding and appreciation on the part of our critic for our Calvinistic outlook.

However, I am not writing this reply to berate our critic friend, but to enlighten him (?) and hopefully thus to establish a clearer understanding of "why" the band in our Christian schools, and also hopefully, to promote a greater appreciation for the organization.

Music is a creation of God for the edification of all men and for His glorification. Man abuses it, prostitutes it, and debases it. It is our duty as Christian music educators to teach our young instrumentalists the true beauty of music as a gift of God and as a real art form capable of fulfilling the creative and expressive desires of man as well as being a vehicle for carrying euphonious sounds to the ears of the listener. To this end band is taught in our Christian schools. The Christian band director seeks to instill in the young instrumentalist a love and appreciation for performing good music that lifts aesthetically and edifies both performer and listener.

The primary reason for the band appearing in the school curriculum is not first of all social but educational in purpose, else it should



Dear Editor,

I am sorry that I did not take seriously enough the thrust of Ban the Band which appeared in the fall issue (1964) of the Christian Educators Journal. To be sure I was as shocked as my colleagues in the area of instrumental music education to find that one of my fellow teachers in the field of Christian education could find so little good in the band programs fostered by our schools. As a Christian music educator, and particularly in the area of band music, I



be extracurricular and relegated to the noon hour or after school time. Now I will even venture to say that the band is not necessarily for public performance but for educational purposes; however, by its very role it is a performing group and this is the function of music, to be expressed and performed for the dual purpose of God-glorification and man-edification. It is sometimes tempting for the band director to justify the band program because it provides for "teamwork", "cooperation", "good coordination" or "school spirit", et cetera. While these are desirable and honest by-products they should not be the only reasons for a band's existence in the regular school curriculum. Through our band activities we try first of all to teach the true value of music through appreciation, history, and theory, and musical performance to the highest perfection we can achieve in our present state of depravity. This is how we try to please our God and delight Him.

Now in order to do this we must teach our young players to produce a lively tone, to master fingering techniques and to read music fluently. Through the band's medium we attempt to give the child an outlet for entertainment, glorification and edification. The child with his instrument must meet the challenge with all its frustrations and joys; sour notes and sweet ones, tears and laughter, happy hours of practice and sad ones, parental nagging and encouragement, teacher's several reprimands and seemingly fewer compliments. Our God is a demanding God and we too must seek perfection even though we often fall far short in the creation of beautiful sounds. Real growth comes with experience and practice. We Christian school band directors try to teach our students to make a valiant effort to use their musical talents, to the best of their abilities.

I do feel that I am echoing the ideals of all good Christian school "band men" everywhere. (Whether or not I am in agreement with the methods and goals of my fellow music educators and band directors, however, does not alter my purposes as a Christian music educator.) It seems to me that simply because a person does not care for the band's medium in contrast to the orchestra and choral group should not give him valid reason to condemn the band as neither Christian nor education. At the same time if the observations made by our friend have created such a poor taste in his mouth for bands, then we music educators better sit up and take inventory of our real goals in the field of band education in our schools. And our principals had better recognize that

the band is music education and not a vehicle for the express purpose of public relations, as good as this may be at times.

In closing I would like to say that a band is a wonderful thing in a Christian school. Who does not thrill to the sonorous sounds of a fine school band? Surely it must find its place in the school's educational curriculum and its extra-curricular performances. Surely it can be overdone. It can become a "sacred cow"; too much money can be spent on bands, directors may be tempted to cater to the demands of "outside pressure", but please Mr. Vandering, let's not "ban the band." I'm sure you'd be the first to regret it. Did you ever listen to a harmonica band with a few guitars thrown in?

Sincerely,

Jerrold L. Van Dyke  
Westminster Christian School  
Miami, Florida



As we were driving along on our way to a music teachers convention, a friend of mine, who is also a band director, asked me to tell him in my own words--avoiding the usual cliches--why instrumental music instruction should be part of our Christian school curriculum. My spontaneous answer was that instrumental music should be part of the curriculum because it does so much for the mind of the child who takes part in it. It gives him more appreciation for beauty of all kinds. It gives him a perspective on timing and teamwork that could scarcely be gained in any other way. It

seems to sharpen the mind--the problems that arise during playing have to be solved quickly as the music keeps moving along. A study of instrumental music also gives the participant a measure of emotional control that can be achieved in no other way.

In spite of the pep and enthusiasm that pulses through the student's body as he plays a march he must still play accurately. Or he may come into class full of vigor and be required to play a soft Bach chorale. Then, on occasion the student has to play alone. Each second that he plays he is on exhibition. Now comes to the fore his background of previous habits of practice and self discipline as each tone is on display. Does this not call for poise and self-control? Also, a person who plays in a group has to contribute his part to the group, and at the same time be submissive to the group. This certainly teaches social responsibility. Now these are some of the things that instrumental music does to the participant. This is what I mean when I say it does something for his mind.

We know that most adults do not continue with their study of the instruments; but there are very few, if any, who regret their experience in band or orchestra, whereas there are millions of adults who have now had this experience in school. Their background in music has served to make life richer to them and they are better suited to adjust to their situations. In a survey of scientists and deans of technical institutes, conducted by the American Music

Conference, two-thirds of the respondents said they were amateur musicians on the side.

The Christian, who believes that God created all the beauty in the world, has a duty to develop his sensitivity to beauty. The Christian, who believes that God created time, must learn to develop his sense of timing and use his time beneficially for His glory. If God gave us emotional natures--the ability to feel joy and sorrow--should we not learn to control and use these feelings to His glory? The God who gave us breath to speak and sing His praise also gave us musical instruments to add to the joyful noise that we make unto God our Saviour. Not to use them to such end would be a definite mistake on our part.

There is a knowledge explosion. Science study is becoming more exacting as are the other courses. We music teachers do not want to stand in the way of our children taking a successful place in the Kingdom of God and in society--we want to help them. Man's nature is the same as it has always been, and for that reason the study of music is as important now as it has always been.

Musical training is a more potent instrument than any other, because rhythm and harmony find their way into the inward places of the soul.

Plato

Sincerely,

John Scripps, instructor of  
instrumental music  
Southwest Chr. Junior High  
Grand Rapids, Michigan

## DO OUR SCHOOLS TEACH MUSIC ALL WRONG?

—Paul Achterhof\*

Our schools are teaching more students how to blow clarinets, toot on tubas or sing in the select choir than ever before. This magnanimity, however, is often misleading and represents something possibly unrealistic. At schools with a lot of activity there is reason to doubt the value of what goes on.

Watch a class of bright junior high school students expertly manipulate the far out con-

cepts of "Modern Math". Follow them into a class of music and you may very likely see the same quick mind being fed a diet of trivia hardly worth their attention. When have you last heard these alert students singing "Grandfather's Clock" or "Clancy Lowered the Boom"? Or has it been "Wonderful Words of Life"?

Is it possible that in your high school credit is not given for band, choir or general music classes? Do you chronically complain about the lack of rehearsal time for your junior high select choir or band? What about the time

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\*Paul Achterhof, A.B. Calvin College, M. Mus. Vandercook College, is now teaching at Chicago Christian High School.



allowed in your school for music in the grades?  
Is it 1/2 hour or is it 2 1/2 hours?

Check the following items to see if your program is really worth the time and effort you expend to it. If it is worthy of its keep, hurrah for the bright, alert, conscientious, and keen students found in our Christian schools.

Is the personnel in your music teaching program trained for his or her job or was the position filled "temporarily" by the "best" musician on your faculty or in your society?

Is the music being offered by the music department appalling, characterized by tasteless trivia and corrupted by fake arrangements?

Are your children being constantly underestimated and given weak educational records

and song book arrangements? Do you cater to the lowest common denominator when selecting vocal music and base your repertory on appeal and its capacity to offend the smallest possible number? (This might be one way to entertain all of your 75 youngsters who must be busy the whole period.)

Is your music department trapped by a growth in performing activity which is taken at the expense of artistic maturity? It has been often said that there is so much emphasis on performance that hardly any time goes into developing understanding and appreciation. Does your school praise creativity, originality, and individualism and turn right around in favor of the musical technician, follower and teammate?

\* \* \* \*

# CREATIVE DRAMATICS--teaching for the future

—Helen Joldersma Bonzelaar\*

Has it ever struck you that what you are now teaching students should in some way be related to their lives in the year 2000 when some of them may be as young as forty years old? How are we to know what the world will be like thirty-five years hence? Knowing the extreme changed in our world since 1930, only thirty-five years past, we as teachers are challenged to prepare pupils to meet the unknown with confidence. Flexibility and resourcefulness must be encouraged in a world where even a fraction of known facts are too numerous to be learned by any one scholar. Creative dramatics provides opportunities for exploration of new situations as well as stimulating the imagination. It also creates interest in drama as a fine art.

What is Creative Dramatics? It is an informal group activity, having no script and no

audience other than the children in the class or possibly another class. No attention is given to whether the actor has his back to the audience or if he speaks loudly enough, rather a player's feeling for his role is emphasized. The value of Creative Dramatics lies in the process for the youngsters involved in acting rather than the product viewed by an audience. Usually props, sets, or lights are not used unless for the purpose of heightening the mood for the children acting. A property such as a scarf,

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\*Helen Joldersma Bonzelaar, A.B. Calvin College, M.A. Western Michigan University, has been an art instructor at Baxter, Oakdale, and Seymour Christian schools in Grand Rapids; she is now teaching in the Memorial School of the Riverview Community Schools, Riverview, Michigan, where the accompanying photographs were taken.

chain, basket, dried weed, or marble may suggest activity, but the loom for weaving the Emperor's new clothes is imagined.

How will Creative Dramatics prepare a youngster for his future? Good social attitudes develop in situations where the children democratically plan as team members for play-making. Basic rules of living are required in planning, playing, and evaluating. A self confidence develops particularly because each child's idea is equally acceptable in Creative Dramatics. A child learns to enjoy expressing his idea, thus developing his creative potential. He gains emotional stability by "trying on the character of another in new situations". How do you suppose the baby bear felt when he saw Goldilocks sleeping in his bed? or How did the real mother feel when King Solomon decided to cut her baby in half? These questions lead to action which helps foster empathy, particularly for the child playing the part of the baby's mother.

When asked what a six foot bamboo pole the teacher brought to class might be used for, children answered, "It might be a giant's toothpick" and "A giant who is a tailor uses it as a yard stick, each mark on the pole is for inches!" The youngster's imaginations were challenged and they found a new use for an old material. Creative dramatics also helps sharpen the senses and stimulate awareness.

When you think back to elementary school days, what learning situations do you recall most vividly? Usually it is those situations in which you were required to do something. Wouldn't a child retain fact and feeling for the signing of the Declaration of Independence if he had been a character in a play which he had helped to design about that event?

It is important when beginning Creative Dramatics with a group that the leader does not expect to produce a complete story. This may not be accomplished for several weeks or months with intermediate students and possibly not for a semester with primary youngsters. Kindergarteners may not do a story as long as they are in kindergarten. Instead they will be concerned with rhythmic movements.

By becoming a character and speaking with the children in character, the leader eases children into speaking. As a fairy queen the leader may grant wishes and ask questions of characters eliciting more dialogue. The story, "The Peddler and His Caps", is good for dialogue if just

# 1 "CAREFUL! THIS ICE IS  
VERY SLIPPERY!"

# 2 "I MADE THE PRINCESS PEEL  
ONIONS, YOUR MAJESTY."

# 3 "I PUT CANDY CANES AND  
PINK SHOE LACES INTO MY  
SOUP: I'M A HAPPY WITCH,  
YOU SEE."

# 4 "WHAT GOOD FROGS WE ARE  
WITH 'LEAP FROG' MUSIC!"

# 5 "BUTTERFLIES FLOAT  
GRACEFULLY WITH SMOOTH,  
BEAUTIFUL MUSIC."

# 6 "WHOOOOO!!!!  
WHAT STEW  
WE WITCHES  
BREW!!!!!"





1  
2 3  
4



5

6





the village scene is played and the leader becomes the peddler talking to the villagers about the strange hats they are trying. Often dialogue slips from a character without any special prodding. How often haven't you seen little children talking at great lengths on a play telephone? This ease is readily recaptured in a free atmosphere.

Characterization is "trying on a character". When a child forgets himself he has achieved. Honesty is the measure. How does Henny-Penny feel being told that the "sky's a-falling", or how do Hansel and Gretel feel when they can't find their way home?

Where the leader directs is most important. Analyzing with youngsters what makes the character do what he does or asking what we would do in the same situation creates a clear idea for acting. Discussion of the physical characteristics of the person pretended clues in action. Then work into a situation where we find the character. A good exercise for students is to sit at a bus station and watch the people who come to the ticket window. How do they walk? Why? Why may it be that they look so sad?

A game can be devised around a box of things that suggest characters. Bits of costumes, driftwood or a plume lead children to create all kinds of characters. Magazine pictures often suggest characters and from these characters a new story may develop. The book, Hailstones and Hallibut Bones, by Mary O' Neill talks about what kind of character a color suggests. Children make and play delightful roles which would not occur to an adult.

Free movement, dialogue and characterization are gained partly by playing portions of a story. Now a complete story dramatization

may be undertaken. Prepare the group by sharing with them a story, a short one. "To share a story creatively a leader must first make it her own...she lives it", says Geraldine Siks in Creative Dramatics with Children. The class must decide whether this story would be a good one to play. Why? Then they must "try on" the principal characters. Often after discussion the children have an expanded play with more characters or new events. They decide how to introduce the sets and characters and what form the play should take. Must the play have scenes? Where is it divided?

When acting time comes, try the first scene with students who have a strong feeling for their roles. This gives students with less confidence or creative potential a general idea of how the play unfolds spontaneously. Evaluate the first scene as soon as it is completed. Ask questions causing the student to discipline his thinking and feeling before he answers. What does the class like about the way the scene was played? Praise what was done well! Evaluate pantomime. When a child sees what he is doing, others see it also. Evaluate character. What made a particular character seem real? Where did a character create something we didn't expect? Evaluate dialogue. What did we hear that made a character seem real? Was the teamwork done well? A leader's positive comment may be followed by questions such as these: "For the first time we did well in putting this scene together. Where was cooperation strong? Which one place did you feel a need for greater cooperation?" Continue by evaluating the use of space and the conflict revealed. What might be done the next time to improve the play?

Repeat this first scene with other players. Then try other scenes and again evaluate. Children create the play as a whole after they have mastered scenes. As long as strong creative feeling persists the story may be dramatized repeatedly. Each child, each group, each occasion is different; as a result, each presentation will be different.

Teachers find that children love this kind of creative activity. It's fun learning. The withdrawn student finds a way out by "being" another person. Subject matter in other areas finds new meaning. Creative potential becomes creative expression and the student discovers new independences and ability to meet new situations. Won't students be more prepared for the year 2000 having participated in Creative Dramatics?







Department Editor,  
Merle Meeter

## TIPS ON TOMES FOR TOTS

The Grinch stole Christmas, but Dr. Seuss (T. S. Geisel) worked an humanitarian conversion on his creature, and the Grinch, Scroogelike, himself carved the roast beast in Whoville. Geisel has drawn and denominated a Zans, a Nizzard, a Star-Bellied Sneetch, and a Cat in the Hat; but are the bizarrely apt names the reason for his clamorous following of children?

Certainly in part, but this contemporary Piper of Mount Soledad, California, narrates his zany logical fantasies with anapestic rhythms, Nashean rhymes, youngling zest, and visually onomatopoeic neologisms: his creatures peep and mutter, but they also waddle and dance. And the illustrations tell the tale concomitantly with grotesquely delightful rightness and imaginative gusto.

Maybe we need The Narnia Chronicles on the kindergartner's level, also. Or is no Christian author willing to spend a year writing hundreds of revisions of a sixty-page book with only sixty words to the page? If so, the Grinch may steal Christmas yearly, for no one will sing the true tale of Christmas secured forever against all Grinchhood by the stable baby born a King.

### EIGHT BASES FOR BUYING BOOKS

But suppose we perpetuate our failure to write the books, how do we select from what the

publishing world flaunts gaudily on circles of display tables: what criteria have we for choosing first-to-fifth-grade books--fiction, biography, poetry, history, science--for classroom and school libraries? I suggest these:

1. The narrative or text should reveal an attempt at accurate, honest interpretation of human relationships and of scientific-historical fact. (Through God's grace, even the infidel is capable of this attempt, for he has been given limited insight into truth.)

2. Neither subject matter nor tone should blatantly promote atheism, nor any other heinous immorality. (However, such books could be used by a supervising teacher to instruct students by contrast--such as nature books that promulgate an evolutionary theory which denies the God-Creator.)

3. Vocabulary, diction, should be on a higher level than slang, vulgarity, mild (gosh, gee, darn, heck) or flagrant profanity. But if the alcoholic's son says damn as he imitates his dissolute father, the integrity of the narrative may justify the reality of the blasphemy. Without this qualification, we lose, for example, Huck Finn.

4. The diction and sentence structure should also be lively and buoyant, not pedantic and stolid. Some words should be new and exciting, rather than statistically inhibited by a misapplied and will-o'-the-wisp readiness principle.

5. Illustrations should be imaginative, colorful (even without color), attractive, and

complementary to the story or text. An excellent illustration, of course, is a peril, a potential distraction, but its pre-eminence is its clarifying-unifying function. It does its work--beautifully.

6. Sentimentalizing, obtrusive moralizing, awkwardly contrived religious conversions, and incredible or evitable euphoric endings are sufficient reasons for bypassing or banning a book--unless there are redemptive qualities. That is, we wince at Paul Hutchen's sanctity and interpolated sermons, but we do

not forget Poetry and Circus and Dragon-fly of The Sugar Creek Gang.

7. Print should be large, dark, well spaced, with wide margins. (Seeing many words on a page is intimidating.) And paragraphs should be relatively short.

8. The binding should be sturdy and the cover inviting. Few paperback books for the lower grades are worth the money--although The Rescuers, written by Margery Sharp and illustrated by Garth Williams, is a superb exception.

M.M.

# Reading in the Junior High School

—Edward Boer\*

There is a place in the educational system known variously as the twilight zone, no man's land, or the junior high school. It is really not high school and it is certainly not grade school. It is a training ground for high school teachers and a passing phase in the lives of many teachers. It is also the point in the child's education at which, while exposing him to advanced and voluminous reading assignments, we decide he no longer needs specific reading instruction.

As more teachers choose the junior high school as the particular area in which they want to work and remain in it, we can acquire a clearer concept of our objectives for the junior high school. I suggest that one primary objective of the junior high school is to help the student develop his reading skills.

expected of the students beginning with grade seven and decreasing the amount of time spent in giving reading instruction. We can hardly say they have acquired the reading skills. First of all, it is rather obvious that not all the students we meet in the junior high have acquired the necessary reading skills. If the students does not have these skills, the first thing we must do is help him with his reading. It makes no difference why he is lacking in reading skills; it may just take him longer to acquire them. The important thing is that if he does not have proper reading skills, somebody has to teach them to him.

In addition to this, primary students are too immature to learn some of the skills needed in junior high and later. It is unlikely, for ex-

## WHY TEACH READING

There is something wrong with the common practice of increasing the amount of reading

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\*Edward Boer, A.B., is a junior high teacher of English at the Millbrook Christian School, Grand Rapids, Michigan.



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ample, that the student has developed the ability to distinguish between fact and opinion or that he has developed the ability to judge the author's purpose. Yet, these are just two of many skills he needs to handle the reading he will have to do. Too much of our teaching at the junior high level consists of teaching for results based on skills which have not been reviewed or even taught. It is not fair to expect the student to master these skills without definite and systematic help.

### SOME SPECIFIC SKILLS

Which specific reading skills the students will need help with depends upon the school system and the particular students involved. I shall discuss a few of the skills with which the students generally need help.

We assume, for example, that if a student reads a chapter, he should be able to find the essential details, but usually he can not. Before we belabor him for not applying himself, we had better investigate. Has he ever had help in distinguishing between essential details and provocative or incidental details? Does he know that only those details which are needed to acquire the literal meaning are essential? And how much practice has he had in making these distinctions? There are many details in one chapter.

Details of time, distance, and dimension are extremely difficult for students to recognize and understand. It is again so easy to assume that these concepts are clear in their minds when they only have a vague idea of them. Is it really facetious to ask if they can clearly

distinguish between big, huge, and great? How about past, present perfect, and past perfect tense? We should not expect our students automatically to be able to select and understand the details of their reading material. They need help!

They also need help in finding the main ideas in their reading material. They might find that their science book has only one main idea in a chapter, and that their history book has many main ideas in a chapter. They will have to approach each subject differently not only because of subject matter but also because of how the subject matter is organized. Adults tend to take each idea and put it in a frame or outline to help understand and remember it. Children have to develop techniques of organization, and someone has to show them how.

Determining the relationship between ideas does not come easily either. We quite likely have made complaints about the inability of our students to notice any relationship between facts. If we have, have we stopped and worked with them on how to determine relationships? And if we did not, we are confident that what we did instead was worth much more to the student, aren't we?

### WHO TEACHES READING

All junior high teachers must be concerned with the reading abilities of their students. We can not just pass it off to the English teacher--he doesn't know how to teach reading either. If he had his training at the secondary level with a major in English, what is there in his training that would qualify him to teach reading? He can and should, however, prepare himself to teach many of the needed skills. Yet, there are skills which can be better taught by other content teachers. Surely the



social studies teacher is in a better position to teach time relationships than the English teacher. And we can hardly expect the English teacher to teach meaningfully the procedures of careful reading needed to solve problems in mathematics. The English teacher must teach reading skills, but they must also be taught in the subject area where the specific application of the skill is used.

Certainly there is no content area which does not require careful, efficient reading, and each teacher of a content area has a dual responsibility for teaching both subject matter and the skills for mastering that subject matter. We must do more than recognize the need for reading instruction or even recognize the skill when we come to it. We must also understand the skill and be able to teach it. Sometimes we wonder whether we can take the time to work on these skills, but for the student's benefit I wonder whether we can afford not to.

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"The essence of academic freedom is that the scholar should have strong convictions, and stand by them, and that the academy should be governed by principle, and abide by principle...

"Adherence to religious and ethical principles is far more likely to bring a true toleration than either a ferocious denial of these principles, or an indiscriminate welcome to every sort of proposal, which commonly degenerates into what Burke calls 'a licentious toleration.'"

-- Russel Kirk



**SOCIAL STUDIES NOTE:** an interesting series of case histories (called "Judgment") of democracy at work has begun in Social Education, the journal of the National Council of Social Studies. The first case study is of particular interest to our teachers. The subject is "Bible reading and prayer in public school." To obtain copies, write to Civic Education Service, 1733 K Street, N.W., Washington, D.C. 20006.

## PERILS TO PROFESSIONALISM:

KNOW THESE BIRDS ?

Every school system has its few rare birds who sing out of turn. Their insistence on rearranging the "music" does not make for harmony. Here are some feathered friends we can do without. . . .

THE SINGULAR FLU-CATCHER's robust appearance is somewhat deceptive. It is frequently felled by flu or that hardy perennial, Virus X, when it is asked to serve on a committee, make a speech, meet a deadline, or pour at the orientation tea. It's willing to help if it can, but it may have to drop everything to take its sulfa shots.

THE RUMOROUS CACKLE is frequently found passing along, hinting at, and bruited about gossip concerning other teachers. It has been known to hold up an original two-bid to tell how poorly prepared Johnny is in this year's class because last year's teacher didn't do a good job.

THE TRUCULENT SPLUTTER views the administrator as its natural enemy. Often found flying off the handle, the Splutter can be identified by the chip on its shoulder.

THE ABJECT SQUAT's song is actually no song at all. It's a sort of bleat, roughly translating into "I'm just a teacher." Often found sitting on fences, frequently with its head under its wing, and perfectly willing to let George stick his neck out.

THE DOMESTICATED CHICKADEE's characteristic call is "My husband says...." This repetitive chirp is irritating, especially to spinster birds who have other things to be proud of. When committee or class work comes up, the Chickadee always has to check flight signals with the home nest tower.

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"The one object of all art. . . is to carry a witness to the lost order of the world."

--Denis De Rougemont



Christian Educators Journal Assn.  
Art Wyma, Business Manager  
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Holland, Michigan 49423

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