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CHRISTIAN EDUCATORS JOURNAL

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the United States and Canada

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STATEMENT OF PURPOSE

The Christian Educators Journal Association, composed of several member or sponsoring organizations, publishes the Journal on a quarterly basis as a channel of communication for all educators committed to the idea of parentally controlled Christian schools, whether at the elementary, secondary, or the 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.

Correspondence concerning articles or book reviews should be addressed to the editor of the appropriate department or to the Managing Editor.

FROM ME TO THEE

and
the

educators

The Uses of Research

If the "uses of controversy" (Winter, 1965) are to achieve their maximum effectiveness, our discussions and debate should include more than a token acknowledgment of the uses of research. If our journalism is to be responsible and professional, we must do more than highlight issues, stir up emotions, and rally around educational flags. What we say should show that we respect research.

Educational research consists largely of taking what our intuitions tell us is true, and checking our hunches and hopes with some kind of patient fact-gathering, and eventually, with controlled experiments. Some educational research is simply a sophisticated form of nose-counting, but some of it is in the respectable tradition of research, complete with isolation of variables, use of control groups, and formulations of hypotheses. It is this latter kind of research which we should be both reading and building.

We in the Christian school movement probably have neither the funds nor the finesse to carry on research in all areas in education. There are some, however, in which we have a particular

stake, namely in those areas in which our claim to "distinctiveness" is involved.

Both secular critics and sectarian supporters of religiously oriented schools make broad claims about the "advantages" of one over the other, or the "differences" between the two systems of public and private schools. More often than not these occur in the context of hortatory speeches and promotional pieces. Little is usually given to show the empirical grounding for them.

Have you ever heard any of the following?

"Parochial school children are more prejudiced than public school children."

"There's more cheating in public schools than Christian schools."

"Christian schools have higher academic standards than the public schools in the same neighborhood."

"Businessmen would rather hire our graduates than those from public schools."

"Parochial schools are more authoritarian in their teaching than public schools."

"Christian school graduates don't contract as many mixed marriages as those Christians who graduate from

public schools."

"Our Christian schools teach a distinctive world-and-life-view."

"Most of our missionaries and ministers are public school graduates."

Every one of these claims is the kind that is subject to a form of verification that could be called research. Yet little attempt has been made by either critics or supporters to find out whether these differences are imagined or real.¹

The Sociology Department of Calvin College has for a number of years been collecting pilot studies on a number of questions like those given above. Some highly interesting tentative findings appear in their files. Some support our intuitions and assertions, and some do not. Most of them need not only replication but revision and follow-up studies before publishing any results.

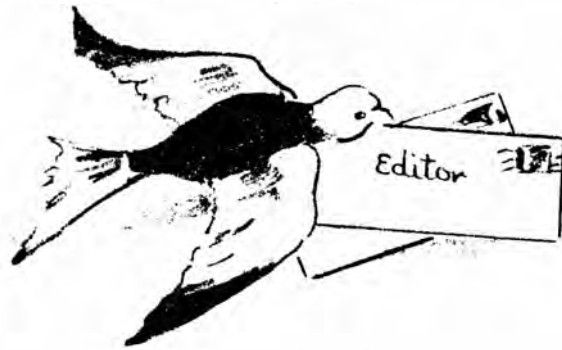
All teachers and principals interested in the broader question of the distinctiveness of our Christian schools can do two things: (1) they can keep abreast in their reading in the journals to what comparison studies are being done,² and (2) they can pursue these matters themselves with their own school populations in the context of graduate studies, whether at summer sessions or university extension night courses. Sociology Department files at Calvin College are open to those who wish to find out what instruments have

¹One place to watch for reports of research studies in this area is in the "Keeping Abreast in Education" section of the Phi Delta Kappan, a "journal for the promotion of research, service, and leadership in education."

²See, for example, Joseph H. Fichter, The Parochial School. Notre Dame: U. of Notre Dame Press, 1958 for a definitive study carried on in Catholic schools.

been used, and what evidence is emerging about the real differences between public and Christian school populations and products.

Our society is now prepared to take a long, hard, and relatively unprejudiced look at the contributions of the private, religious school. The University of Chicago, for example, has a massive study, supported by Carnegie Foundation funds, underway of all independent schools, including our Christian schools. At very least we should be knowledgeable about research; at most, hopefully, we could contribute to it. To do nothing is to remain mired in wishbone thinking, and this may find us someday with only our wishbones on which to rest our case. This could become an increasingly uncomfortable perch. D. O.



Dear Dr. Oppewal:

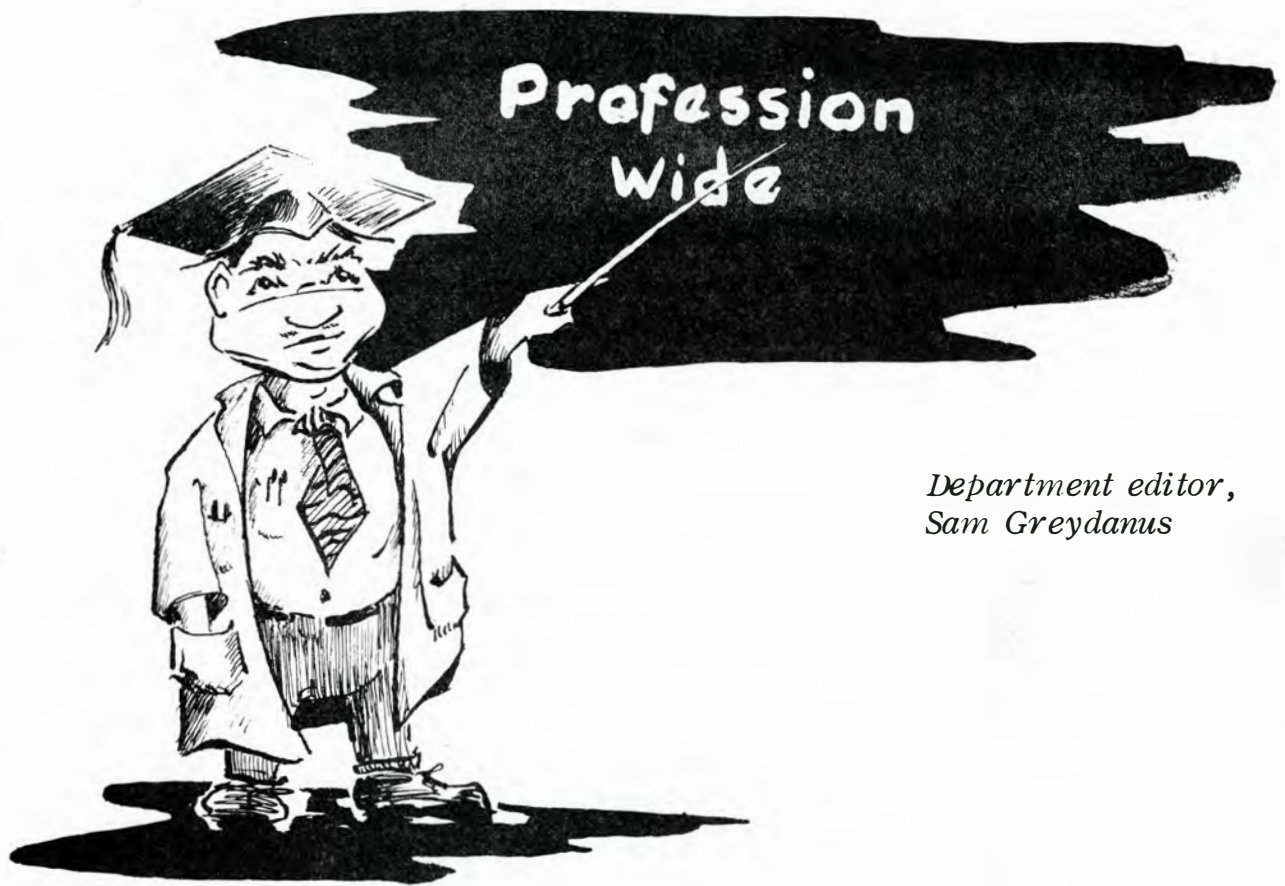
I've just finished reading the first issue of your revived and revised CHRISTIAN EDUCATORS JOURNAL. Let me assure you that it was a joy all the way through.

The boldness of your proposals (e.g., M.C.E. degree), the perceptiveness of your reviewers (e.g., BSCS biology), and the pull-no-punches daring of your critics (e.g., School for Vice, The Play's the Thing, and Ban the Band) promise much for the future.

Congratulations!

Cordially,

Frederick Nohl, Editor,
Lutheran Elementary School Materials,
The Lutheran Church, Missouri Synod.



*Department editor,
Sam Greydanus*

A FABLE

Many years ago when an animal kingdom was established, all the animals met together and decided a very important matter. The topic under discussion was the education of the young animals. In a chorus of affirmative baas, moos, growls, and neighs, the animals decided that those most qualified to teach the young beasts were the mouse family. As the elephant noted in his editorial in the weekly Trump, "We are indeed grateful to the mouse. Not only for his leadership and his advice, but now for the most important task of teaching our precious young animals. The mouse is, indeed, a scavenger in the field of knowledge. Constantly searching and examining, throwing out the rubbish and polishing and applying that which is good, the mouse is eminently qualified to teach

This fable first appeared in print a few years ago in The Christian Home and School magazine. The purpose for writing it was to stimulate teachers into writing about any of the forces which were eating away the distinctiveness of Christian Education. Since then, if anything, the Cat seems to have become a little fatter. The mice are still being swallowed.

The invitation to write still stands by means of this professional department. Let us write about our profession. What about the Christian school movement? Where do we stand on the issues of the day? Students versus ----? What are our strengths? Our weaknesses? In what ways can we give direction to the laymen in the Christian school movement? You name it, package it, and we will publish it.

Direction...direction...direction....

our beloved young animals." It was also decided to give the mouse family an allotment of cheese for their services each week. As one mouse cheerfully stated, "The amount is nothing to grow fat on, but as long as we can nibble at it, we shall remain happy and satisfied.

Since the kingdom was very poor financially and each animal was finding it very difficult to keep the man away from the door, school was held in an open field in good weather and in an evergreen forest during inclement weather. The mice, steeped in the animal philosophy which had been handed down from bull to buck, were giving the young animals the best education possible. The young animals were saturated with true animal values along with the fundamentals which they would need as they entered the adult animal life.

Time passed on. The animal kingdom increased by leaps and bounds. The animals were also prospering and much of the former sacrificing and pov-



erty was forgotten. The mice were finding it more and more difficult to teach the young beasts the true values of animal life. Also, at this time some questions arose concerning the practicality of the courses taught by the mice. The horse put it this way, "I have been rather successful in man-trading. I want my young colts to learn this business. They must develop their practical horse sense." The cow thought more practical courses in her process of milk making should be added for the

benefit of her young calves. The rabbit also had his idea about what type of courses should be taught. A newcomer to the animal kingdom the cat, was quite an advocate for this new type of instruction. Now the cat, who was suddenly growing in importance in the animal kingdom, was a likeable beast. Most animals enjoyed talking and associating with him. He seemed to have a lot of progressive ideas and above all he always seemed to agree with whatever was said. The mice were busy teaching the growing number of young animals and didn't hear any of this growling dissatisfaction with the education. Two mice, however, were made aware of this plot to change the educational policy. They immediately called a mice's meeting and informed those present. But the older mice decided it wasn't any of their business and, besides, with the increase in the enrollment they were too busy to engage in outside activity. The two mice then wrote a letter in the "Growls" of the Trump, answering the advocates of this new idea in education. In short, they informed the animals that the parents should teach their young animals these practical courses. Also, these two mice mentioned the cheese problem. The mouse family had increased, but as yet the cheese allotment had remained the same. Then a rather startling event occurred. The two mice suddenly disappeared, just as if they had been swallowed up. And the new courses were added to the animal curriculum.

A short time later, the cat and some of his friends aroused the community by showing the animals the lack of buildings in the school setup. In a speech filled with beautiful purrings and, at times, passionate meows, the cat eloquently pointed out that only in buildings can there be a proper environment for learning. "We owe it to our young beasts to give them a proper education, which they are not now re-

ceiving." Everybody agreed. Even the elephant called the cat's plea a very wonderful help to the community and praised the cat for his wonderful spirit and foresightedness. The mice also approved of some sort of shelter because by now their fur was rather spotty due to the thin allotment of cheese each was receiving. But they were horrified when they saw the plans for the new buildings. No expense was spared and the buildings were to be the most beautiful in the kingdom. The mice said nothing, however, because they were too busy teaching the overflow of young animals. Three mice did raise some objection to the elaborate plans and spoke of their dubious value to real education. But soon after they squeaked their pleas they disappeared. And no one except the rest of the mice noticed it.

With some of the mice disappearing and the animals increasing, the inevitable happened. There was a mouse shortage. Classes were enlarged but the mice, of course, knew this was a bad policy. The situation worsened. At a public meeting the cat gave some of his thoughts on the situation. With all the modern means and aids of education and beautiful new buildings, was it necessary to have just mice teaching the young animals? Could not, for example, the opossum, whose love for young animals can be seen in her clinging young ones, teach in the lower instincts? Or the rabbit, who, as we all know, is a great athlete. Just think what he could do for the young bucks. After all, is the mouse important in the modern education system? In this present emergency could we not try to use other animals who are so willing to teach our beloved young beasts?

The mice were not at this meeting because they were too busy preparing for the next day's teaching assignment. When the news was brought to them they were too surprised and speechless to do anything but squeak. Some of them

immediately suggested that the mice unite and with one large squeak descend upon the meeting and once and for all dispel the weird notions of this mad cat. But cooler heads prevailed, and it was decided that wiser instincts would probably overrule the cat at the meeting and the mice would only hurt their position more in the community by such unwise action. Some of the mice did, however, go to the meeting and voice their disapproval. The animals, who by this time had approved of the cat's plan, listened with growling impatience. The cat then, rather snarlingly, asked the mice whether they had become teachers because they actually could not do anything else. At this question many of the animals thought the cat had gone too far; but in the minds of some the seeds of doubt were planted. On the way home from the meeting, the mice who had spoken up against the cat disappeared, and no trace was found of any of them.

The opossum and the rabbit began teaching. The remaining mice tried to show them the importance of true teaching, but the opossum was rather busy with her own batch of young ones and the rabbit had other interests. In a short time many complaints were being heard throughout the kingdom concerning the learning that was going on in the school. The horse complained that his young colts could not subtract and add as they should at their age. The goat, who was a collector and had many con-



tacts with the humans, complained that the young animals were not being taught to understand the human language. He pointed out that every animal in order to survive in this kingdom must understand the human language. The animals coming out of school now were not even able to understand the very simple rudiments, such as "Scat" or "Beat it." The cow complained that her young calves were no longer thinking while they chewed their cud. Even the elephant in his weekly editorial complained about the young animals having traces of humanism in their animal philosophy. They also didn't seem to know what they stood for anymore. They were not proud of their animal background. The elephant suggested that the mice sign a pledge stating what they believed. The cat approved of this and thought some investigation ought to be conducted in the schools. When the mice heard all this, they shook their heads in amazement. Couldn't the animals see that a mouse being a mouse could teach nothing but that which was right to teach? Here again, some of the mice suggested that maybe the animals didn't know the real problems confronting the school because the mice had really never informed them. Isn't this the time to unite and with all means possible educate the animals concerning the problems? But the majority were a little frightened at the idea of uniting. Didn't even the elephant write an editorial in which he condemned any uniting of mice? "Even the cat, who, we must admit, has done much harm to education, has our best interests at heart. Remember when he stated in a speech that he thought it a good idea if there was anything left over from the building fund to give it to the mice in the form of cheese? It surely wasn't his fault that there wasn't any left."

Things went from bad to worse. One by one the mice disappeared and other animals had to take their place.

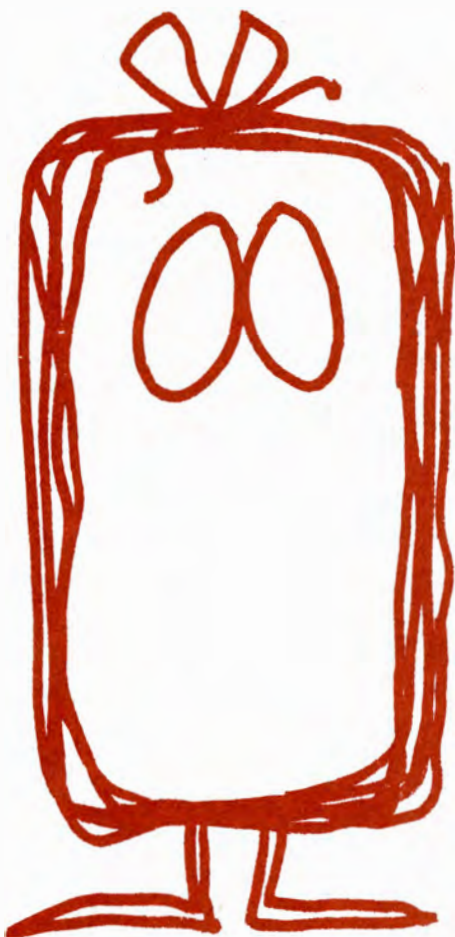
Even at that, the other animals who were willing to teach were becoming fewer and fewer. The cheese was spreading thinner and thinner. The remaining mice had only one ray of hope in which they placed all their confidence. That was the annual meeting of the representatives of each of the animal families. Surely here the grave problem facing the whole community of animals would be discussed. But when the program for the forthcoming meeting was issued it listed no such thing. A major matter to be discussed was the expansion of the building and campus of the institutions of higher instincts located in the central part of the kingdom. The cat, who was chair animal of the long-range committee, was prepared to present three very important plans. The few remaining mice looked in vain for any statement of the problems of education, such as the disappearance of the mice.

Finally one day there was only one mouse left. He was a mouse who had always objected to combating the ideas brought up by the cat. Just before he disappeared he was heard to say, "Oh, if we had only organized, if we had only written more, if we had only kept our leadership in the kingdom, if we had only spoken more to animals concerning the problems of education, if we..." And the cat licked his lips and padded contentedly away. S.G.

TEACHER TYPES:

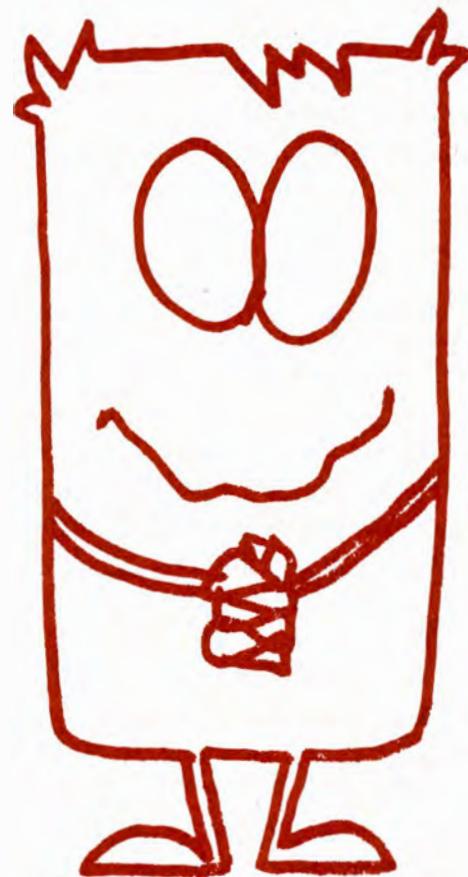
Our cartoonist is Mr. Robert A. Jensen, B. F. A. and M. F. A., Ohio University, who draws under the name of "Robin." He is presently instructor of art at Calvin College and is teaching art in grades 4, 5, 6 at Seymour Christian School, Grand Rapids. The periodicals in which his cartoons have appeared include Friends, One, Scope, Classmate, Motive, Youth, His, Eternity, and Writers Digest.

TEACHER TYPES



ROBIN

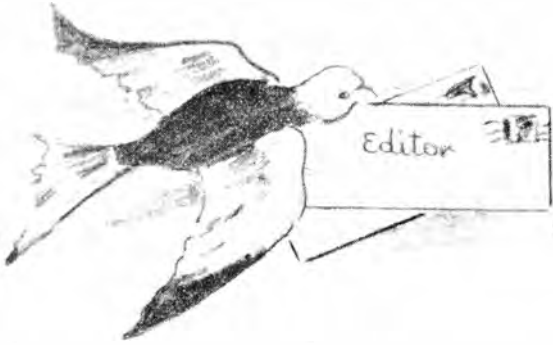
"I'M TOO
TIED UP
IN THINGS
TO BE
A
CREATIVE
TEACHER"



"I'M TOO HUMBLE
TO BE CREATIVE
IN MY TEACHING"



"I ALWAYS WANT
THE FACTS HANDY"



Dear Editor:

I would like to respond to the article "Money Is the Root" by Mrs. Pals in your winter issue. As a member of the profession which many feel is being over-looked in Johnson's Utopian "war on poverty," I was disappointed, even disgusted at times.

Before I spell out the cause of my disappointment, let me dwell on a few areas of agreement. First, many of our teachers are underpaid and need a financial boost if they are to remain in the profession. Secondly, I, too, recognize that teachers must pay for tires and groceries with cash rather than with "devotion," "sacrifice," or "prestige." Thirdly, we all deplore the fact that many professionally minded persons must haul garbage or paint houses during the summers as an economic necessity. Fourthly, there is a seeming social injustice when garbage collectors or truck drivers or bricklayers receive a salary equivalent to twice that of a teacher. If this proves my concern for the very real problem, let me now show my disagreements.

Mrs. Pals makes the bold assertion that Christian education will not survive unless parents learn to pay the "full price for their Christian school teachers." If there were any validity to this assertion, our entire educational program would have toppled long ago. The growth of the Kingdom doesn't depend on our receiving a salary equivalent to those in the public school or in the sanitation business. Christ's earthly following didn't survive and

grow into a strong Church because Matthew, James, Peter, or even Jesus received a wage or benefits equivalent to those of the tax collectors, fishermen, or carpenters. In fact, if this had been their demand, none would have been fit for membership. Is sacrifice still required or has that requirement been waived? I think the answer is obvious.

The argument that the survival of the Christian school is contingent on full pay can be answered other ways. In my seven years in the profession I have come to see that those who were doing the most for the Christian school movement were those who had as little or less than the next fellow, but who were "content with their wages" (Luke 3:14; Phil. 4:11; I Tim. 6:6,8). Not surprisingly, but thankfully, I have come to know and appreciate many of these co-laborers in our profession. At the same time, it just seems that those who left the profession "to make a living" already had more than average.

Another point of serious disagreement is the contention "that Christian school teachers should organize and demand, not ask, for a higher pay scale." Theoretically, necessarily, and practically the teacher-parent relationship is one of cooperation, rather than of opposition of the union-management variety. If our Christian school movement ever reaches the point where teachers organize into "unions," the heart of our movement will already have been removed and we will have little justification for existing in the name and spirit of Christ. What would we dare call ourselves?

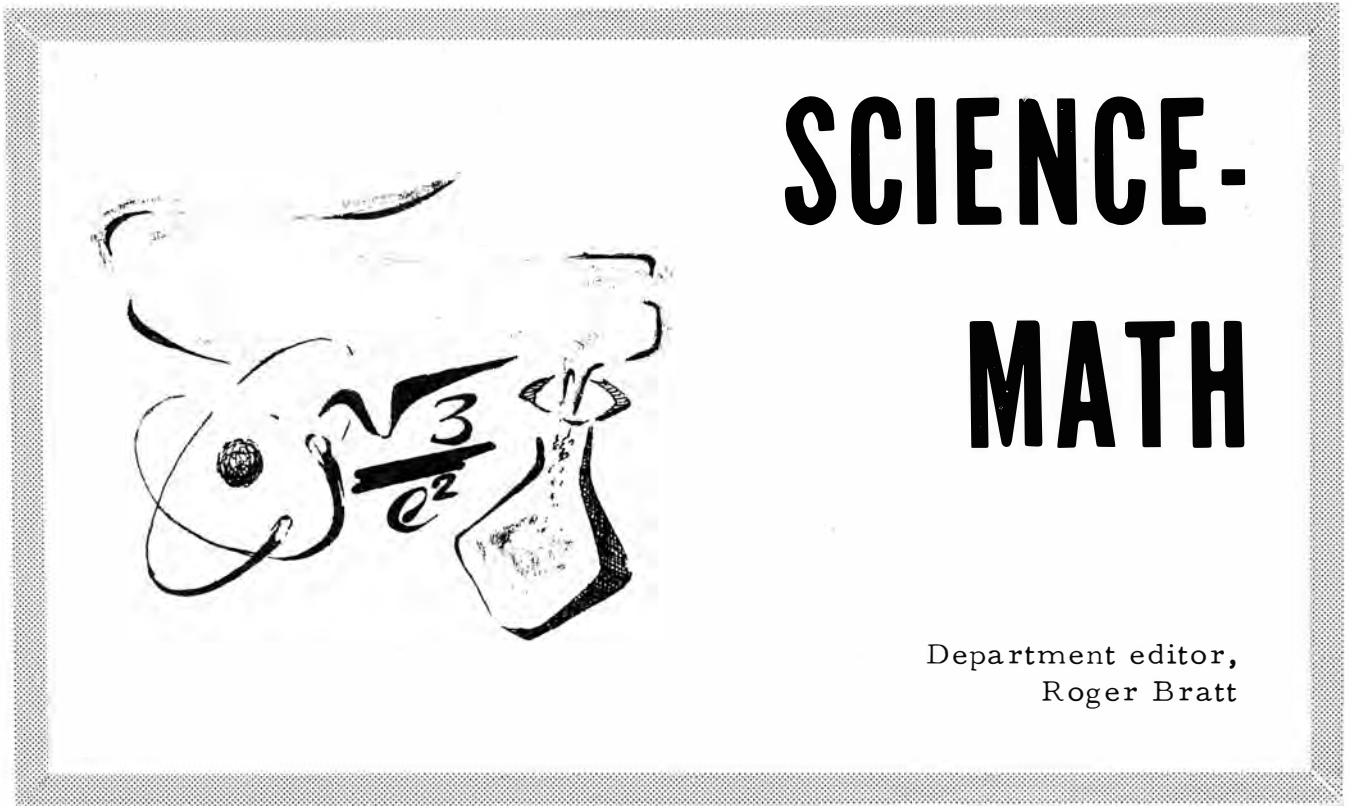
Are there solutions to the dilemma? Yes! First of all, we as teachers must examine our own motives and value systems. Do we dare to leave all and follow Him for the sake of a crown? Secondly, we must find ways

to broaden our financial basis of support.. That can be done within our constituencies, and we need not wait for a dole from our governmental god-father. Young individuals and newly married couples must be told to put their contributions in the present tense rather than the future. Lastly, we as a profession must show the communities we

serve that we are truly deserving of their support.

In conclusion, if I had to collect garbage or even drive a truck all day, I would demand that kind of pay, too. And that in all sincerity.

Sincerely yours,
Norman De Jong, Principal
Allendale Christian School



Spring is almost here, and with it again comes the planning for the staging of school science fairs. Pupils and teachers are busy organizing and preparing exhibits.

It is time that we pause and analyze these affairs which have become an integral part of the science programs of many schools. Are science fairs really of any value in the creation of scientists and do they stimulate an interest in real science? Do science fairs have a place in our schools, or could the time and energy of teachers and pupils be put to better use?

In this issue of the Journal, a practicing scientist expresses his views

based on his experience as a judge of school science fairs. This is an issue which needs discussion and we will be waiting to hear your opinions.

This issue of the Journal also introduces our discussion of mathematics. Many of our schools have adopted programs incorporating the "new math." Is the "new math" being accepted by our teachers, and is it living up to its advanced billing? In the next issue, we hope to present articles which explore the value of the "new math" in implementing Christian principles. R.B.

THE CASE AGAINST SCIENCE FAIRS

*Frank E. De Boer**

Science fairs have become quite popular in the past ten years; in grade schools as well as in high schools they are "in." It is my judgment that they should be "out," especially among the younger children.

There are two major arguments against science fairs: first, they tend to overemphasize science to the detriment of the rest of the curriculum, and second, they favor the "whiz-bang" aspects of science. Before elaborating on these two themes, it is well to point out that a limited, strictly controlled fair would be an asset to the science program of a school; but as these fairs are now run, they are harmful to the school, to the scientific community, and especially to the student.

OVEREMPHASIS AND POOR EDUCATIONAL ECONOMICS

The first argument is that these fairs overemphasize science. It is obvious in several schools that a large portion of the pupils are presenting projects at the fairs. It is also obvious that most of the students have spent a lot of time in the simple mechanics of constructing the exhibit. What few facts (or more likely, what fact) they have learned could have been learned in a fraction of the time by studying the book from which the exhibit was copied. This, coupled with the fact that most students are not interested in the sub-

ject that they are presenting, casts serious doubts on the overall economics (time and educational economics) of the whole affair. (It is evident from judging these exhibits that most students know only what they show in the project and no more.)

Would it not be far more productive, far more economical of time, to teach the student what nature is all about, what people have thought and done, or how one goes about discovering what are the laws of the universe? The years after leaving school are not the years to learn how to read and absorb ideas, how to manipulate numbers, how to speak another language. And it most certainly is not the time to imbibe a love of learning, a desire to read, a fondness for ideas. This is the time when one can, at leisure, learn many facets and facts of a subject. But first there must be a desire to learn and some competence with the tools of learning: reading, writing and arithmetic. (By this last phrase, I do not mean to sound old fashioned; I mean these to be taken in the broad sense. For example, one should be able to read easily, to understand thoroughly the ideas presented, and to read languages other than one's own.)

Finally, it would be well to have an overview, a broad perspective of several fields of study in order to put specific data and ideas in their proper place, to give them their proper worth. This is not meant as a curriculum outline; it is simply meant to point out that neither the grade nor the high school is the place, nor has the time to give a large portion of its and the student's time to teaching and learning

*Dr. De Boer received an A.B. degree from Calvin College in 1950 and a Ph.D. in chemistry from Northwestern University in 1954. He has worked as a chemist at Standard Oil Company and at the Argonne National Laboratory. At present, he holds the position of senior metallurgist of the Central Research Department at Continental Can Company in Illinois. He has served as a judge of science fairs at Lansing, Illinois, Christian Grade School and at the Illinois State Final Science Fair in Champaign, Illinois.

the limited amount of knowledge represented by the science fair project.

LOUD NOISES AND INTERESTING TOYS

Let us proceed to the "whiz-bang" part of the argument. What I mean by this is that science fairs cause the student to miss the meaning, the core, of scientific endeavor and to emphasize the peripheral aspects. The most striking exhibits (the whiz-bang exhibits) are popular because they gather attention. It is indeed rare when the exhibitor can show, during questioning by the judge, that he has learned about scientific principles from this kind of exhibit. That which science is after is knowledge, understanding of the physical world about us; the basic question is what, how, and why. (We need not argue this last point with the mechanician who says that "why" is an unaskable question, nor with the pietist who oversimplifies by answering "Because God wills it.") But what is generally presented at the fair are the uses to which one can put science: one can make loud noises or interesting toys, or one can prove a favored point by choosing the appropriate data. These kinds of science fair projects indicate that the student has absolutely no concept of, no feel for, the discipline whose data he is using. The other kind of project, the illustration of some particular fact or idea does no violence to the subject; the first argument would be more relevant to these projects.

My concern here is not that I love science and therefore feel hurt if some child misuses it. My concern is that the child will get an entirely erroneous view of biology, of physics, of all of science. The child will graduate to the idea that a physicist makes gadgets to go to the moon. As a matter of fact, it is the engineer who wants to use ideas to make things; the Sputniks and

Rangers are engineering, not scientific triumphs--when they work. The scientist wants to learn about the moon simply for the sake of knowing. It certainly is not the intention of the school to misinform the pupil about this important field of knowledge, but this is the result. I contend that this is caused mostly by the undue emphasis on the science fairs.

TRICKERY IS NOT THE ANSWER

There is this to be said for science fairs: they get our young people interested in science. Or do they? There are any number of practicing scientists who were introduced to the field by a chemistry set or a toy microscope. So, should not the science fair serve the same purpose on a broader level? This can be answered in part by asking two other questions: (1) Can one really practice well in a field into which one has been tricked? and (2) Is not a very lively interest in academic subjects a better introduction to scientific



professions, which basically are academic, than are toys and half-truths? Obviously, there have been good people introduced to a scientific career by school work on a fair project, but certainly not as many as those to whom the inspiring teacher has been a critical factor.

To sum up: Science fairs take up far too much time that could be more

profitably spent by both the student and the teacher. And they are harmful to the student in that they distort the picture of science so badly that it is not recognizable. For reasonably advanced students, those who show a grasp of the subject, who show an

eagerness to find out for themselves the truth about what the book says, the science fair is probably a valuable teaching aid. But this is certainly not true of the majority of those exhibiting --even in the state finals.

* * * *

Where Do You Stand with the "New Math"?

*Clarence Pott**

The so-called "revolution" in mathematics and its accompanying reverberations in education is now well on its way towards its tenth birthday.

It may or may not be too early to evaluate it, depending upon one's point of view. If one is a "traditionalist" who has determined to resist the tide, he may feel that having held out this long, the rest should be easy. If he is one of the so-called "modern" crowd waiting eagerly to jump on the first tank moving towards revolt, he can probably cite some meaningful advances in these few exciting years of the revolt.

More likely you are one of us who, having been trained with traditional weapons, were fearful and maybe even resentful of this tide which threatened to engulf us or leave us far behind. Some of us probably spoke from lack of knowledge when we first determined to resist and out of haste when we failed to realize that revolts are usually slow in coming, swift and devastating at their peak, and often far-reaching in their effects.

How many of us in this latter group at first didn't aim our arrows at the

"new mathematics" theorists who spoke glibly about sets and multiplicative inverses? They even wanted to dispose of traditional solid geometry and to stress the real number system. This same group of educators said that transposition is a naughty word in mathematics and forecast doom for the student who used it.

We sought out others in our profession who shared the same thoughts and talked the same language. We eagerly read the statements of those leading mathematicians and educators who daringly stated that the revolt was only Sputnik-inspired and would soon fade out. We quietly assured our principals and school board members, who also had been doing some reading, that all would be well and that our mathematics program was still sound and "modern."

Some six to eight years have passed, and we are entering the phase of the revolution which could be the most meaningful and beneficial. Much of the smoke of the initial outbreak has cleared away, and we are now able, to some degree, to assess our own programs

*Mr. Pott, A.B. Calvin College, is a mathematics teacher at Holland Christian High School.

in the light of the aftermath of the revolution.

Fortunately, those who resisted the change just because it was a change are in the minority. However, the other extreme can be just as dangerous. To change for the sake of change can often be disastrous. The old adage, "A little knowledge is a dangerous thing," might be applied to the latter group. The mathematics teacher who lacks sufficient information has done harm to the modern program, and would have served to a better advantage had he retained the old materials.

What about our math programs in this evaluating phase of the revolt? At present, it seems as if most schools have effected some changes. Some have been cautious, some moderate, and others a bit reckless in their haste.

Whatever the case in a particular school, we surely must all agree that the new emphasis in many areas is long overdue. Included among the significant innovations on the elementary level must be the attempt to present arithmetic as a body of knowledge rather than just a set of procedures. Arithmetic has been a series of techniques of calculations and little else, according to proponents of the new program.

Much good can be said for the new programs which make extensive use of the logical structure of mathematics. In most of the programs, it is worthy of note that they have been guided by the principle that computational skills should be introduced only after the concepts necessary for understanding have been developed.

Practically all of the new mathematics studies have stressed improvement in the vocabulary of mathematics. It is a recognized fact that one of the important problems in the teaching of mathematics is the mastery of its highly specialized vocabulary. Doesn't the

new approach show a definite improvement in this respect?

It appears that it is in the elementary schools that the reforms have been most radical, and, perhaps, this is where radical reforms were most needed.

Dr. Edwin E. Moise, professor of mathematics and education at Harvard graduate school, stated in a recent publication of the Council of Basic Education that

Surely good teaching has been done for a long time in many places, but in general the elementary teaching of mathematics has been a disaster. The most obvious evidence of this is the image of the mathematician in the popular culture. Normal people think of mathematics as dismal, and they got this impression not from anti-mathematics propaganda, but from their own experiences with it, in the schools.

Whether or not the new emphasis in math answers Dr. Moise completely, is, of course, debatable; but we agree that there is much truth in the statement. This is not to point the finger of guilt at all elementary teaching by any means. It is highly probable, however, that given the same enthusiastic teachers with much of the new elementary material, we will see some better results, particularly in the important area of concepts.

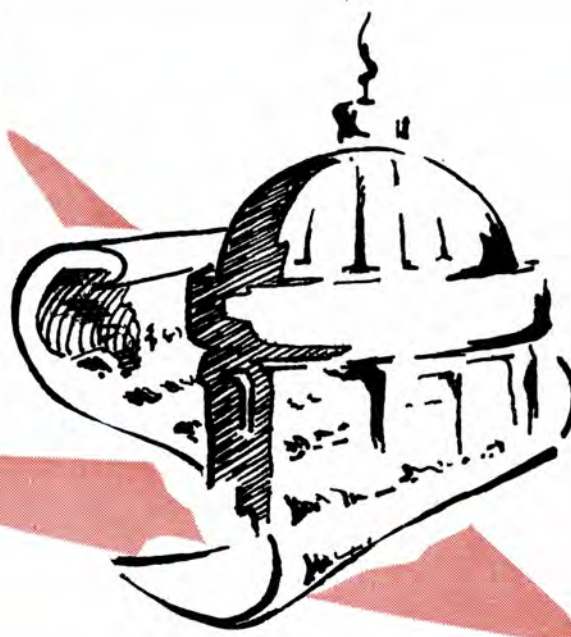
On the high school level, the revolt may not have been as extreme, but it certainly has been felt. In the interest of some acceleration, as well as presenting the material in a more meaningful manner, some of the traditional topics have been forced into the background or dropped entirely from the curriculum.

Much of solid geometry has become expendable to be absorbed in its proper place with plane geometry. The think-

(Concl. p. 32)

SOCIAL SCIENCES

Department editor,
Herm Beukema



SOCIAL STUDIES STIRRINGS

SUMMER INSTITUTES:

Under Title XI of the newly-expanded National Defense Education Act, teachers of history, geography, English, reading, and news media, as well as school librarians and teachers of the dis-advantaged will be able to attend summer institutes in colleges and universities across the country. Teachers who are interested should write to the individual colleges which set up the institutes. The colleges' and topics were announced in March. Mr. Miltenberger of the U.S. Office of Education estimated that between 20 to 80 institutes will be set up to help geography teachers alone. They will be eight-week institutes with at least 40 participants who will receive \$75 a week while attending plus \$15 per week per dependent. Our private school personnel are eligible. This is an excellent opportunity for our teachers in all

of the above areas. Write to the U.S. Office of Education for further information. (Also, by now most school principals have the full listing: see yours now.)

CONTROVERSY!!!

The most controversial area in the Social Studies field today is in the elementary school. Two problems seem to persist, one in the primary grades and the other in the intermediate.

The primary grade dilemma seems to center around the question of which subject or subjects are the best to use as the background of teaching social studies. Some teach the social studies with the reading program, others with the science program, and others may use separate teaching units. Which do you use and why? What method has worked best for you? What materials do you use? Our department would appreciate replies to the above questions. An interchange on various methods, units and resources would be beneficial for all. Let us hear from you!

The intermediate grade problem centers around the best method to use

to teach social studies. Should the separate discipline approach or the fused be used? Most of our schools use the separate discipline approach, feeling that it gives more depth. The fused approach is receiving the support of many experts and is being used in many of the new curriculum projects.

Once again, we heartily welcome your views; those of you who teach in this area at this level are the best qualified to give administrators, fellow teachers, and curriculum makers the value of your experience and ideas.

Which method do you favor and why? We would welcome your opinions soon so we could use them in the May issue. There is a real need for professional exchange on this issue. Let's be professional!

Please send any correspondence to me, digest or dissertation, opinion or idea, suggestion or sequence.

A problem which has faced our Christian high schools for many years is whether we should participate in in-

terscholastic football. A few of our high schools have begun programs this school year on a limited basis and plan to have complete programs in the near future.

There have been many arguments (friendly, of course) among our teachers, administrators, and board members regarding the pros and cons of football in our Christian schools. Due to our own peculiar educational background very few of us are aware of the inside issues. We have not had any actual experience and therefore do not know the advantages and disadvantages. I feel that we, as professional educators, should have a voice in this and not have outside pressures be the ones to push or discourage a football program.

The following article, written by a man who had seventeen years experience as a coach, is the first of, I hope, several on this subject. He welcomes any replies regarding his article. Let's hear from YOU!

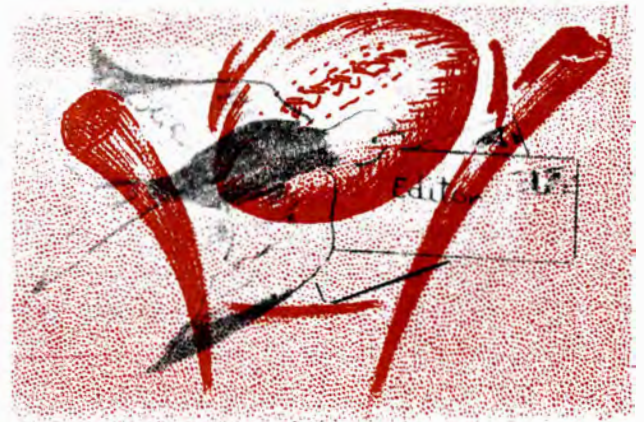
H.B.

Football in Christian High Schools

*Gene Rothi**

I say there is a place for football in Christian high schools if certain conditions are present. The most important is having physical facilities in the school that will permit a total physical education program for all students in the way of formal physical education classes. It would seem inconsistent to offer an activity for a select group physically, of an extra-curricular variety, when the physical welfare of the total group is not being provided for.

Assuming the physical facilities are present and assurance is there of enough players for adequate substitutes and a



*Mr. Rothi, A.B. Hope College and M.A. University of Michigan, is Coordinator of Guidance and Counseling of Grand Haven public schools, Grand Haven, Michigan.

developmental program, there is a place for football and even a need to provide this opportunity for a large number of our boys.

SELF-DISCIPLINE-SATISFACTION- NUMBERS

Football is a body contact sport. It is rough and not everyone would be expected to like to play it. Unless someone has played the game or had close exposure to it, I am sure one cannot begin to appreciate the hard work involved to field a team. Hours of practice, hard work, enduring physical discomfort without complaining, rigorous self-discipline, demanding calisthenics to build the body up (not to tear it down) all go into participating on a football team. Hours of practice, which often is sheer hard work and not always fun but is satisfying, make a football player. It is satisfying to the individual because he sees his physical development, he has accomplished something because he has worked hard and endur-

ed discomforts, and he has learned a form of discipline not faced before.

Football offers an opportunity to many to take part in athletics where they don't have the talents that would enable them to make other teams. If a boy likes competition, isn't afraid of bodily contact, is willing to work hard, will take instruction, and develop a loyalty to his teammates and school, there is a place for him on the football team. Physical qualifications will help him but are not as important as in most other sports. Football can accommodate almost an unlimited number of players on a team; most team sports, by their nature, cannot claim this. I am sure there are many boys in Christian high schools that would take part in football, if it were offered, who do not have the chance now to receive the benefits of competitive athletics.

Some say football abuses the body and the body being the temple of the Holy Spirit makes football an unchristian activity. I say football develops the body. True, there have been injuries and often much unfavorable publicity when these injuries occur. Other sports have their injuries also, just as walking downstairs takes its toll of casualties. There are some doctors that would say the stress and strain placed on the hearts of growing boys in track and basketball has more potential harm than any other sport. Statistically, however, football is shown as twelve times safer than driving a car. We also have a far greater number playing football on an organized team basis in educational institutions. In football, as in all other sports, being conducted under competent coaches, the participants learn the value of proper care of the body and good health habits. Participants not only learn this as a bit of

PREVIEW OF COMING ATTRACTIONS !

LANGUAGE ARTS WORKSHOP IN COMPOSITION

Calvin College, July 26-August 6

--NUCS and Calvin College to be
joint sponsors

--Nationally known scholars to
speak

--Twenty stipends to be awarded

--Teaching materials to be produced

For information and application blanks
see your principal.

knowledge, but they have to put it into practice.

BENEFITS OF PARTICIPATION

Football is an activity that strengthens the mind as well as the body. There is a constant need for rational thinking due to the game's continuous problem-solving situations. You must consider the down number, position on field, the opponets' strengths and weaknesses and your team's strengths and weaknesses, wind direction, time to play and the score. It is much like a chess game.

Some might say grades will suffer, but after sixteen years of keeping a close watch on this, the opposite was found to be true. With few exceptions, the grades were found to be better when boys were involved in a sport than when they were free. They know they have to maintain their grades, their time is more limited and as a result they make better use of their time. There are fewer discipline problems in school, and attendance is better. They don't have time to be hanging around street corners or chasing in cars.

There are apt to be some financial problems to begin with. If grounds are available for physical education classes they can be used for practice fields. For games it might be possible to rent neighboring facilities. To equip a player is more of a cost than in other sports and it pays to buy good equipment. Football, however, carries the athletic budget in the greater share of schools offering football.

EDUCATIONAL VALUES

It would seem, though, you first have to determine the educational values of football to the school program. This pertains to those who will participate, the student body, the alumni and public supporters. If we are convinced there are values and they are worth the effort, then we plan how to provide for the program. Anything

worthwhile is going to mean more work, planning and preparation. There is no reason to believe that Christian school followers would not be just as enthusiastic in their support of football teams as they are of their basketball teams. If this were so, the financial problem would not be a problem. It might even make possible a broader physical education program to provide for all students rather than the select group now taken care of.

Space does not permit exploring many other values of football such as the leveling process of football if a person has a tendency to become too impressed with his own importance. Athletics should represent the finest in young manhood. Someone said our children will tend to idolize the athlete. If my children are going to pick someone to be their hero, I would prefer it would be an athlete and the values he should stand for.

Anything may be in danger of over-emphasis, and this means school administrators must see to it that all activities are kept in their proper perspective. Judging from the high quality of personnel Christian schools have been able to attract to handle their athletic programs thus far, there is little reason to believe this would not hold true in obtaining personnel to coach football and make possible the offering of this activity.

* * *

THE TEACHER

I took a piece of human clay
And gently formed it day by day,
And molded, with my skill and art
A young child's soft and yielding heart.

I came again when days were gone --
It was a man I gazed upon.
The form I gave him still he bore,
But I could change him nevermore.

--Author unknown



Department Editor,
Merle Meeter

GIVE A GOLDEN KEY

For many students the essay is a grim and murky fortress behind a barred, forboding gate. An iron key may force an opening, may begin a severe and formal survey; but a golden key less gratingly unlocks the way, then lustrously reveals the craftsmanship of structure, the interior furniture, the secrets of the house.

No child is too young to turn the golden key when the mentor--who holds the mansion in estate--entrusts it to him; nor is the key returned: the illuminating key becomes the trophy of an exploit, the symbol of a world.

Come with me a moment; we shall ring a set of keys.

Swift's "Modest Proposal" suggests that the slaughter of Irish children for food would benefit his impoverished countrymen; the key is the word "modest." The grotesque irony of

"modest" murder becomes the golden key.

"Conclusion" of Walden--and that whole testimony to the independent life--may be unlocked by "simplify," its sufficient golden key. (If Thoreau prescribed economy, why did he write: "Simplify! Simplify! Simplify!"? I asked my friend. The answer: "He was thorough.")

When Virginia Woolf reflects on "How Should One Read a Book?", we see the golden key in "sympathy": "Do not dictate to your author; try to become him." But here we need another key to unlock an inner chamber: "severity." For "as judges we cannot be too severe. Are they not criminals, books that have wasted our time and sympathy?"

"Shooting an Elephant" by George Orwell exposes the puppet functionary, bound to perform by the natives he presumably controls. Orwell, a British police officer in Burma, shoots a mad

elephant "to avoid looking like a fool," and because "the people expected it of me and I had got to do it." "Imperialism," badly tarnished, is the golden key.

Paradoxically, "blackness" is the golden key that leads us into Melville's "Hawthorne and His Mosses": "Soothed by the hum of bees in the meadows around, how magically stole over me this Mossy Man! But in spite of the

Indian-summer sunlight on the hither side of Hawthorne's soul, the other side--like the dark half of the physical sphere--is shrouded in blackness, ten times black." Yet, strangely, the golden key to Melville's existential terror is "whiteness," ten times white.

Admit it, then; we are little more than doormen who identify and convey the golden keys. But a doorman, too, has satisfactions. M.M.

The Partnership of Teacher and Student in the Writing Assignment

*Steve J. Vander Weele**

QUALITY OF TEACHER SUGGESTION

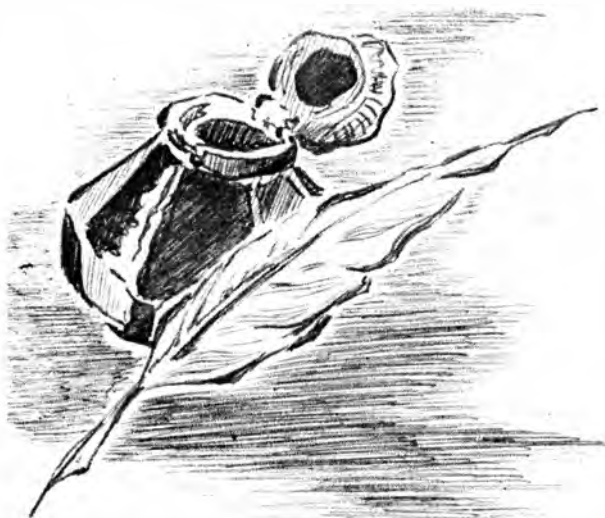
Whether a kindergarten pupil needs a start in getting a story under way or a graduate student is in quest of a suitable subject for his doctoral dissertation, the teacher is expected to open doors, suggest possibilities, nudge the student towards a workable project. His view is so much more extensive, his world is so much larger, his experience so much broader, that he can be of immense aid in helping students to get started on a composition assignment. He can provide the stimulus for a response which the student had thought beyond his capabilities or interest. It has been my experience that students ordinarily welcome a list of suggestions instead of being told "You may write on anything you like." Sometimes the student should discover his own topic, and free choice can often lead to a successful composition. But the student feels relieved, usually, when the dif-

ficulty of writing is not compounded by the necessity of discovering a subject. I have found even that freshman college students welcome specific assignments for their term papers, especially if they realize that the teacher has tailored the topic somewhat to the student. They find the freedom to choose "some literary work or author which has appealed to you" not liberty, but oppression--initially, at least; this is the kind of unchartered freedom which weighs on the shoulders like an albatross.

So the teacher is on the spot when he assigns a composition. He displays his own store of ideas, the scope of his own imagination, the quality of his own thought and life. By the way he sets up his assignments, by the values which he assumes, by the way he shapes and forms his questions, he exhibits what

*Professor Vander Weele teaches English at Calvin College. He has the Ph. D. from the University of Wisconsin.

he himself has noticed and observed and read. A teacher of composition, therefore, will be as alert for a new idea or slant or pattern as any writer. His reading should be broad and diversified. We have all received stimula-



tion from unexpected sources. The quality of the student's composition may be directly related to the quality of the teacher's suggestion.

THE SUBJECT--ALL AVAILABLE; SOME WORTHY

This problem, that of subject, together with the art of motivating, seems to me crucial if a composition assignment is to be successful. Perhaps a fragment of a dialogue taken from an early Latin reader may be useful in launching a discussion of these concerns. What follows has been taken from an account of English society at work. It was written as a Latin lesson by Aelfric, monk abbot of Eynsham in the tenth century. The pupil begins the conversation by saying to his teacher:

We children beg you, teacher, to teach us how to speak Latin correctly, for we are very ignorant and make mistakes in our speech.

The teacher asks:

What do you want to talk about?

The pupil replies:

What do we care what the subject is, provided the language be correct, and the discourse be useful, not idle and base?

Two points in the student's reply seem worthy of amplification:

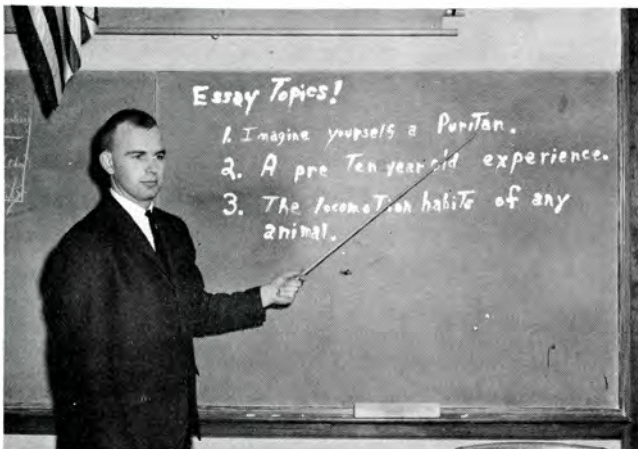
1. All subjects are available for comment.
2. The subject ought nevertheless to be a worthy one.

Surely the student is right when (speaking, of course, for Aelfric himself) he asserts that the subjects of discourse can be drawn from the whole world of life and experience--consistent, of course, with the maturity of the pupil or student, and the knowledge he may be expected to have. I prefer such an attitude to the point of view that the teacher must assign a topic that deals immediately and directly with a moral theme, and that the tone ought to be sober, didactic, weighty. God's great plenty is open to him. This is our Father's world, and we are His tenants. He wants us to notice, to ask questions--the right ones--about it, and to become articulate about it. He wants us to become involved in it, to mix with it, to feel it deeply and sensitively. He wants us to understand it, to know it, to explore it. And writing helps us to appropriate this world. It sharpens the eye, it calls for ordering and disciplining and arranging, it shows how grace and style can get closer to the full truth than mere literal statement can. There should be room, too, for fantasy, for exploration, for unusual questions, for hypothetical situations. What would you do if you had a million dollars? Where would you travel if you won an all-expense tour anywhere in the world? Where would you most like to live? What adult do you admire most, and why? What skill would you most like to learn? What would you get to see if you stood at the bottom of a chimney and looked upwards for several hours? Or, how can one be a mod-

ern David? A modern Gideon? A modern Solomon? The possibilities are endless.

MOTIVATION BY APPARENT NEGATION

Motivation is crucial, too--especially in the grades. The teacher cannot assume that the student will have the commendable eagerness shown by the pupil in the Latin dialogue. Strategy can make the difference between a listless and an animated theme. The student must be lured into writing. Let the teacher take what he knows to be an unpopular side of a situation, for example. Let him state his case in such a way that the students are bursting to refute his position. "I believe you students should all wear uniform clothing to class." Or, "I believe our town should be annexed to Large City." Or, "I've been thinking that the Democrats (or Republicans) may not be so far wrong after all." Again, "Did it ever occur to you how ungrateful the Americans were to the English when they revolted against them in the 1770s?" Or, "I think I am going to move to Florida. Here we are, in November, with six months of cold, rain, snow, and dangerous driving and heat bills." As the teacher proceeds to develop his idea in a provocative way, it should not take too long for every hand in the room to be raised in challenge. Now the teacher can act astonished and observe



that it is obviously impossible for him to hear everyone out, and he can tell them that, instead, they should put their protests down on paper. As students mature, obviously, such gimmicks become less necessary. But if writing is to have any animation at all, there must be some grain of irritation, some misconception to set right, some cause to plead for.

ESSENTIALLY--A QUEST FOR WISDOM

I like that other observation of the student, too--the discourse should be "useful, not idle and base." It precludes the superficial. I like the importance humanity receives in such an attitude. I like the way man is regarded as the center of things, under God, as the remainder of the dialogue shows. For ultimately the composition should be related to the human situation. Whether the essay is a piece of description, a report on a scientific process or experiment, or a report on a historical episode, the importance of these for man should be indicated. The relevance for humanity of all life and experience should be suggested. For information and knowledge are sterile and barren until they are seen in relationship to man. Wisdom consists of the understanding of such relationships. The dialogue I have already referred to manages this well, too. It is, for the most part, a description of various trades and occupations. But the conversation drifts naturally and easily to the importance of each trade for the human community, and from there to the subjects of competence, character, genuineness, and wisdom. Indeed, the pupil's final answer to his teacher is worthy of emulation: "We wish to be simple without hypocrisy, and wise that we may turn from evil and do good...." If the teacher can quicken such a quest for wisdom, he will have done well by his students.

THE SURVEY, or Why All Watch the Same Program?

*Gilbert Besselsen**

WILL THEY MEET DICK AND JANE?

On the first day of school the par-
ent with a new enrollee in the first
grade waited near the office. On the
table nearby lay a complete reading
program for grade one.

"Buying a lot of new books?" she
asked.

"Yes," replied the principal,
"we're trying a new program in read-
ing. It's a combination of rather new
theories in linguistics and programed
instruction."

Paging through a workbook-like
reader, she asked, "Where's Dick and
Jane? I grew up on that pair. Won't
my Reggie get to meet them?"

Probably not Reggie, but hundreds
of Johnnies and Janes in our Christian
school classrooms will meet Sally,
Dick and Jane another year.

That much was proved by Dr. John
Van Bruggen and nine reading students

at Calvin College in a 1961 survey re-
port entitled, "Emphasis in Reading
Instruction in the Kindergarten and
First Grade Classes of the Christian
Schools."

Spending seventy-five cents for
this mimeographed booklet gained for
me many statistical statements and
generalizations about the school, the
teachers, and primary reading. Hid-
den among the charts and summary
statements was one that seemed most
significant.

Table 16 reveals that of the teach-
ers in grade one who returned
completed questionnaires, 73 per
cent used the Scott Foresman
series as their basic readers, . . .
only three different series of
basic readers are used in over 90
per cent of the Christian schools
(Van Bruggen survey, p. 49).

That was a remarkable and impor-
tant consensus -- probably a greater con-
sensus than the Christian schools could
gain on a basic and thorough statement
of Christian school philosophy, or,
possibly, as great as the consensus
that would measure sentiment among
our parents on tax-aid to private
schools.

WHAT SIGNIFIES THIS SURVEY?

One implication of this consensus,
I believe, is our loyalty to the whole
word or sight method of teaching read-
ing. Our teachers and administrators

*Mr. Besselsen, A. B. Calvin College and M. A. Uni-
versity of Michigan, is a teaching principal at the Bax-
ter Building of United Christian School, Grand Rapids,
Michigan.



concur in the judgment of reading professors and textbook authors that the best way to teach a beginner to read is to teach words, not letters, nor sounds of letters.

Definitions of reading methods are as diverse as the number of persons attempting to convince others. The Council for Basic Education, proponents of phonics instruction, particularly



attack the look-and-say experts who sooth the teacher that questions the position of phonics in the reading program. The experts have a bland answer in the multiformity of systems which exploit all methods of reading instruction in the series whose sales they promote. Purists from the C.B.E. lament the confusion resulting from this marriage of methods in which phonics and sight recognition of words are wedded in the sales pitch, but after the honeymoon, phonics is relegated to the chore-room in the daily reading program.

The majority of reading specialists are grouped today in the International Reading Association. They reflect the ideas of reading methodology presented by Gates and Grey, prominent authors of primary reading series.

Harris stated clearly the methodology of the word method:

All of the currently popular methods start with wholes, and proceed later to the consideration of the parts of words, in contrast to the older alphabet and phonic methods which started with single letters and built words out of them. . . .

Furthermore, effective reading in its later stages requires that words should be recognized immediately, not slowly pieced together. The good adult reader has gone beyond reading words as units; he perceives words in phrase groups and takes in an average of two words at each glance. Starting to read in larger units from the beginning prepares the way for rapid, efficient reading later (Harris, How to Increase Reading Ability, p. 285).

These principles of "starting with larger units or wholes (are) in accord with sound psychological principles" (Harris, p. 285). Since these sound psychological principles are not enumerated, it must be assumed that it is unnecessary to identify them. That is regrettable. Research in reading is



riddled with contradictory studies. Studies can be found to support or supplant any view of reading methodology. Identification of the supporting research is imperative. Possibly, Mortimer Smith's suggestion is true and obviates the need for enumeration. Smith writes, "The research of these specialists is repetitive and ingrown, full of quotations from each other and the chief and invariable conclusion of such research is that more research is needed" (C. B. E., p.4). One could even contemplate a still more ridiculous piece of research to determine the weakness of the whole-word method. Consider a dissertation based on the study of vertical eye regressions per picture per page, to match the studies already made of horizontal regressions of the eye per line of words.

TWO ROADS DIVERGED. . .

Both reading-groups presented look backward in time. One longs for the return to the original methods of American reading methodology found in the alphabet and the sounds of letters. The second group casts worshipful glances back to the leaders whom we have mentioned, finding respectability in imitating the masters. Neither can be all wrong; neither is all right.

The sad truth is that there has not yet appeared a royal road from Reading Readiness to Reading Efficiency. Durrell's statement of 1940 is still pertinent today. Little progress has been made in improving the methodology of teaching reading.

There is no one best way to teach reading. Despite the large number of publications on the teaching of reading, --professional books, teachers' manuals, national committee reports, and research studies--we have not yet discovered a definite series of steps which a teacher may follow

with the assurance that all pupils will grow in reading ability in the most efficient manner (Durrell, Improvement of Basic Reading Abilities).

A second implication raises a serious question about the professional nature of the Christian school teacher. Are the staffs of the Christian schools searching for the new and better? Are there trial programs and tested results that should be shared through this journal with all Christian schools? The implication in the large percentages of Van Bruggen's survey is a lack of research. Equally regrettable is the lack of reporting on the few programs being tried and tested in the schools.

AN ATTEMPT AT SYNTHESIS

Allow me to share the initiation of one project with you. The first-grade reading program at Baxter Christian School for the past two decades has been the Scott Foresman reading series. In nearly all parts of the reading program the teachers continued the tra-



ditional practices as suggested in the teacher's manual. They, with a host of other first grade teachers, had grouped their children as to reading ability. Only in the time of presenting the elements of phonics had they hastened the suggested sequence. We can candidly report that nearly all of Baxter's pupils learned to read in grade one using the Scott Foresman reading series.

Now Baxter proposes to use the MacGraw Hill Programed Reading series (1964) as an attempt to improve the reading program at Baxter. Basically the series is a combination of word analysis and stimulus-response learning. It brings together studies in the fields of linguistics and programed instruction.

A departure from the traditional method to the revolutionary concepts of linguistics and programed learning demands a presentation of the rationale for selecting this approach to first-grade reading. The four paragraphs that follow may clarify the reasons for this selection.

The reading series must be systematic and sequential in developing the ability to read. The MacGraw Hill series finds in linguistic theory a method which concentrates "upon establishing patterns of letters and sounds regardless of meaning, to provide the child with a constantly growing set of sound-letter constants by means of which he converts letters to sounds and almost automatically converts sounds into meaningful words" (Bloomfield and Barnhart, Let's Read, p. 6). The linguists believe this approach to be more systematic and sequential than phonics, which they call the learning of isolated words.

Reading methodology must use the results of what has been learned about child development. About ten years ago Dr. B. F. Skinner applied the psychological principles of stimulus-response learning to the improvement of

classroom materials. Skinner stated that behavior could be changed by reward training. Sullivan Associates, the developers of the programed materials in reading, accepted this principle of learning but rejected Skinner's insistence upon the use of a machine. They had found out that the workbook-type of program was just as effective and more economical to place in the classrooms. The reading series also recognizes the varied factors in reading readiness and encourages teachers to defer the reading task until they have taught the readiness concepts with materials from another section of the workbook.

The reading series must show promise of producing statistical results on a standardized test which compare favorably with test results based on other reading series. Sullivan Associates developed the reading series by repeated testing of the materials on individuals and small groups while constructing the texts. After assembling the materials in workbook form, the staff tested the programed reading materials in several elementary schools in California. The classrooms selected were typical in size of the pupil load, in the varied cultural backgrounds, and in the range of pupils' abilities. Statistical evidence favored the classes which used the Scott Foresman texts. The range of scores earned was greater in the experimental group. The lowest score in the experimental group was near the mean of the established statistics of the independent test group. Clearly the experimental group contained no non-readers, and had progressed at a faster pace than the control group.

WHY WE LIKE THE PROGRAMED SERIES

The reading series must provide the pupils with tools which build toward a high degree of independence in read-



ing. The degree of independence rests in his ability to handle the tools and in individualizing the rates of progress. The tools he needs are the sets of

sound-letter constants which translate the letters into sounds, and sounds into meaning almost automatically. Meaning becomes almost automatic because the relation of sound to meaning has been developing since the pupil learned to respond to speech and to talk. Use of the programed material frees the teacher from teaching reading groups and managing seatwork for helping the pupil who has encountered a difficulty. The remainder of the pupils are making progress through the programed booklets at their own rates of speed.

Baxter's staff intends to incorporate statistical data into its reports on the merits of the trial program as well as the observations and opinions of the participants. With this scope of information available to the school, it should be easier to determine the place of programed reading in the primary curriculum.

WHAT ABOUT LINGUISTICS ?

We, as Christian teachers of English, assume that language must in some way be religious. In the High School English Curriculum Guide,* the writers set forth a religious justification for the study of language as follows: "The study of grammar and the writing of composition find their basic educational justification in Christian schools in the religious idea that man is a rational creature who can know and exhibit the structure of language.... Language ex-

hibits the structure of the mind of man, and of the mind of God insofar as man reflects his Maker's image." The writers of this guide, then, go on to state how we English teachers must attempt to state this structure.

We study language as a science, which will at some point or other and in some means of other, be used as a tool. I should like to state the dilemma of the English teacher. It is this science with which I will be concerned.

The dilemma is this: we have for years taught this science by the methods which have now become known as tra-

*High School English and Curriculum Guide, D. Oppewal, ed., Grand Rapids, Michigan: National Union of Christian Schools, 1960.

ditional grammar. In opposition to this, we have the relatively new approach which has been brought to us by the linguists. The traditional approach dates back to the time of the Romans, and some people have thought that the English language was Latinic in structure. We must, however, avoid debunking this traditional approach simply because it is traditional.

Traditional grammar attempts to proceed by definition. The student spends much time, years in fact, learning the eight parts of speech. He, in this time, grinds out many exercises applying these definitions. Now, linguists, after taking a long, hard look at our language, tell us that these definitions, while accurate in many cases, are yet not accurate in all cases. For example, the student learns that the word "this" is a pronoun by definition. Pronouns, however, can be used as adjectives, which are another part of speech with another definition. "Who" is a pronoun, but it is used in many cases as a conjunction, which, again, has another definition. By now, one begins to see the confusion that the traditional approach can cause. Consider with me one more example. The sentence is defined as "a complete thought." Psychologists have difficulty in explaining what a thought is, but we, English teachers, presume to be able to explain it. (Notice also that this unexplainable thought must be complete.)

In the beginning, I quoted the English Curriculum Guide, and it was then noted that the structure of language revealed the structure of man's mind as it reflected the image of God. Can we do justice to the image of God, which we are trying to project in our grammar, with a half accurate science? I contend, then, that the traditional approach does not do justice to the image

of God as reflected in the structure of our language because it is inaccurate.

Furthermore, this traditional approach does injustice to the image of God in man's mind because it is incomplete. No attention is given, in the traditional approach, to the spoken language. There is more to language than words. One must not assume that spoken language is just an incomplete and corrupted form of the written language. I must point out that the written language, composition or literature, is really a recording of the spoken language. The spoken language, like the written language has structure. However, it also has a number of characteristics which the written language does not have, and these--stress, pitch, and juncture--the traditional approach ignores.

The dilemma, then, is this--the traditional approach to grammar is inaccurate and incomplete, but what can be done to remedy this situation? We must ask if there is a better science of language. There is. The science of language, linguistics, whether it be structural, transitional, or some synthesis of these, has obtained to a large extent an accurate, descriptive approach to our God-given language. I shall not attempt to explain the study of linguistics here when Fries, Hughes, Hall, Pooley, et al., have done it so well.

In conclusion, the Christian teacher of English must give an accurate and complete description of the English language, because language, in its structure, reveals man's Maker, and we can not fall short of the very best. Students must know what our language is "really" like.

--Robert L. Otte,
Central Wisconsin
Christian High
School

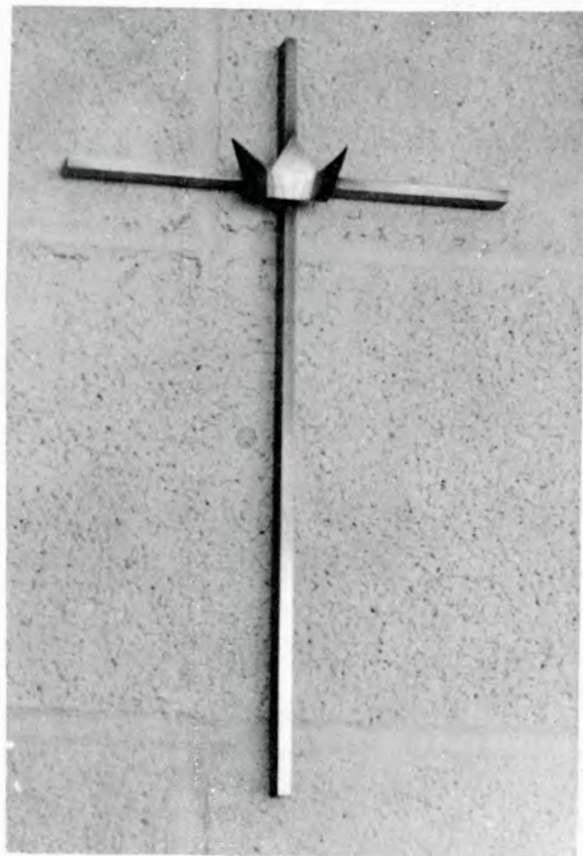


THE ARTS

*Department editor,
Vernon Boerman*

CHRISTIAN SYMBOLS FOR THE CLASSROOM

"Is there anything in your classroom which shows it to be specifically a Christian one?" was the general effect of a short comment in one of the NUCS bulletins to teachers during last year. Taking a chagrined look around,



I had to admit there was nothing in my classroom--and wondered why. Then a glance into the Concordia Publishing House catalog showed me some interesting possibilities.

The cross-and-crown which I soon sent for is pictured here. Many of my students have expressed appreciation of this "Christ as the King of our lives" reminder on their classroom wall; it has also provided the take-off point for a worthwhile discussion of Christian symbolism.

Besides Concordia, another source for inexpensive and tastefully designed Christian symbols is Daystar Designs. Their contemporary religious art and worship aids include, for example, a stylized series of panels representing the church year, a catechism series, and a Lord's Prayer panel (shown).

Their pupil's symbol, the "Morning Star Triad," is noteworthy, too: it is a symbolical blend of the manger (birth), cross (death), and gold (resurrection) of the Christ.

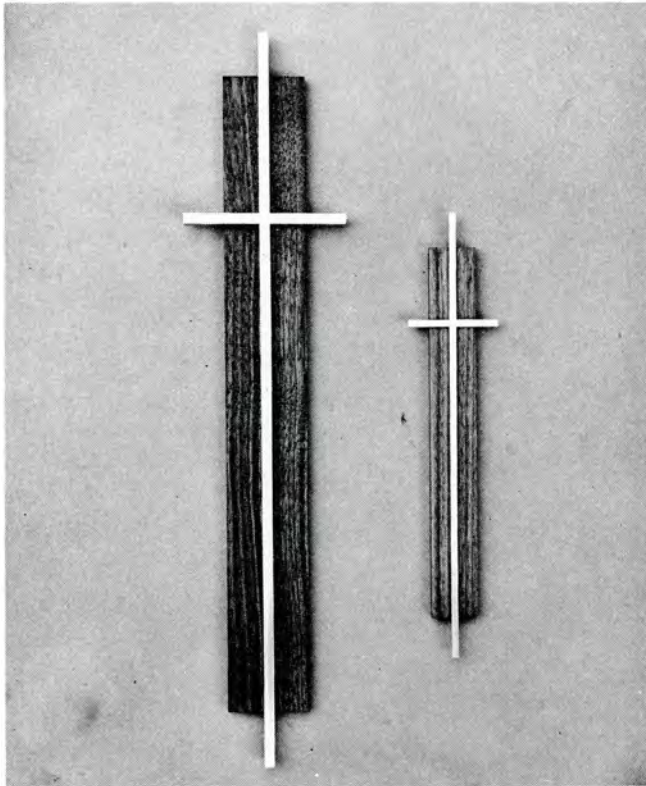
The address of Daystar Designs is 5707 Mesmer Avenue, Culver City, California 90230. And if the Concordia catalog is not already in your school office, ask for it from Concordia Publishing House, St. Louis, Missouri.

* *



Dear Editor:

I think that the Ban the Band article was a farce, since it is based on a series of part-truths or untruths... Surely no one would be so naive as to say that God cannot be praised by playing instru-



mental music. If we are going to examine our curriculum for distinctive Christianity then we would do well to throw out a good share of it, such as English, physics, speech, business subjects, home economics, and phys ed.

...Are we content to let our youngsters go on thinking the Beatles are the most, or are we going to try to help them appreciate good music? Band and other forms of music teach the child to enjoy something higher than the average radio program. If it does not, then the teacher had better look at his course a little more carefully.... The educational value of any course depends on the ability of the teacher to produce a reasoned attitude. Is the author saying that band instructors are therefore poorly trained? If so the solution is not to BAN the band but to get more qualified instructors....

Band directors feel band has a place in Christian education or we would not be band directors. We will continue to do our jobs as per our contracts until people like you can convince us otherwise. Needless to say, you have not begun me. You may have, however, succeeded in convincing certain administrators and others who see band as a threat to athletics. For you see, athletics is really the sacred cow roaming the pastures of Christian education.

Kenneth Dobbs
Rehoboth Mission School
Rehoboth, New Mexico



ing prevalent today that most of the deductive process can be mastered in plane geometry alone appears sound. Trigonometry, too, has felt the blow as the treatment of it now moves drastically away from the almost endless solving of right triangles and related problems of former days to stressing functions of real variables. Surely it appears as if this shift is in the best interest of progress and modern day technology.

New terminology, accent on proof, and further development of the number systems is continued from the elementary studies and adds more than a refreshing note to high school mathematics teaching. Modification of content has forced some changes in teaching styles, but the first overall evaluation seems to be favorable. In almost all new programs, acceleration has been a highly worthwhile by-product and probably long overdue.

A recently published statement by the mathematics department of the University of Michigan is concise and clear in its intent. In part it states

It should be emphasized that the actual topics appearing in a high school mathematics program are less important than the level and the style of instruction and the level of importance and sophisti-

cation to which the students are expected to rise both in routine manipulation and in depth of understanding. The number of days to be devoted to a topic or the inclusion or exclusion of certain minor points are of less importance than is the undefinable concept of "mathematical maturity."

We believe that a true rise in a student's level of sophistication cannot be achieved simply by accelerating a traditional mathematics sequence which frequently emphasizes rote memorization and uncomprehending manipulation and then adding at the end either a calculus course or a course containing a potpourri of small topics from a "modern" point of view. A true improvement must start early in the sequence: the program must be strengthened from the bottom up. Several programs of this type exist. . . .

It then goes on to list some of the newer math programs. This statement may serve as a fine guide in our evaluation. We want to be professional, and it seems to me that this would include open-minded evaluation of the new emphasis in the light of the traditional. To ignore tradition and history is, of course, absurd. To refuse to recognize meaningful innovations in programs even though the mathematics contained in them is not new, would be just as foolhardy.

Let's replace our arrows with the tools of modern warfare and hope that our students may be challenged to see the real face of mathematics. As teachers, let us be students so that we may be recharged with enthusiasm to more effectively present the age-old mathematics for the new day.

* * *

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