The JOURNAL of TRUE

Education

VOLUME 12 FEBRUARY, 1950 NUMBER 3

The JOURNAL of TRUE

Education

KELD J. REYNOLDS, EDITOR

Associates

ERWIN E. COSSENTINE
LOWELL R. RASMUSSEN
GEORGE M. MATHEWS
ARABELLA MOORE WILLIAMS

CONTENTS

ISSUED BIMONTHLY, OCTOBER THROUGH JUNE, BY THE DEPARTMENT OF EDUCATION, GENERAL CONFERENCE OF SEVENTH-DAY ADVENTISTS, TAKOMA PARK, WASHINGTON 12, D.C. SUBSCRIPTION PRICE, $1.25 A YEAR. ENTERED AS SECOND-CLASS MATTER AT THE POST OFFICE AT WASHINGTON, D.C., UNDER THE ACT OF CONGRESS OF MARCH 3, 1879.

THE FOUR AGES OF RELIGIOUS EXPERIENCE

An Editorial

FAULTY pedagogy rather than bad theology is responsible for much of the coolness of young people toward religion. In teaching the common branches we apply that greatest contribution of modern psychology to learning, the grading of subject matter and vocabulary to the age of the child. We assume that this method is equally good for teaching religion. In this we are wrong. The method is not good enough. Religion is not like the common branches. Christianity is a rebirth into the family of God; it is a daily walk with Deity in a close and personal relationship. The mind can accept new information, relate it to old learnings, and from this synthesis form new concepts; but it is the heart that accepts God. Other learnings are primarily for the intellect. Religion is first for the heart, then for the intellect. In spite of this known truth, religion is taught as if it were a subject.

Religion is not Christianity unless it finds expression in behavior. Most of the teaching of behavior is by ritual. The adult may know the meaning behind the ritual. It is not necessary at first that a child understand, only that he follow the ritual. A small boy is taught, for instance, that when a woman enters the room he is to rise. He does not know the philosophy behind that act of respect. Comprehension grows as the act is repeated. So with the custom of kneeling when prayer is being offered, or bowing the head in quiet meditation upon first being seated in a church; the child does not at first comprehend the doctrine of omnipresent God to whom worship is due. But in time he comes to recognize the reality of the relationship between God and himself, because he has bowed low and continues to bow low. The young child learns almost everything through expression, by doing. Even those of us who are mature learn new things best that way. More people always have been and still are converted by the dignity, beauty, and heart appeal of worship than by all the arguments in the world.

The child will not, however, remain interested in ritual unless it is given a connection with life. He wants an explanation of the ritual, but it must be a concrete explanation. Abstractions are too difficult for children and for most adults. Christianity was most effectively promoted in the beginning and is best promoted now not by teaching philosophy but by reciting stories: the story of Bethlehem, of God who came to dwell with men; the stories of Christ's life, which illustrate and illuminate the practice of Christianity; the story of the cross, with its lesson of love atoning for sin; the story of the resurrection, the foundation of the Christian's hope of eternity. As soon as a child is old enough to enjoy stories he should be taught those of his faith. But it is unlikely that he will perceive their importance unless the telling of them is tied to the acts of worship which make up the devotional practices of his church.

Even stories and ritual together will not produce a religious boy or girl unless sooner or later there is added the experience of contact with God, unless the child is brought face to face with the Presence. Between the ages of ten and fifteen the child is likely to have, thanks to the starting of adolescence, a quickening power of apprehending Deity, just as he has a quickened power of understanding people. If his progress up to this point has been normal, the ritual becomes vital in the light of his expand-

Please turn to page 29

"For Their Sakes"

George M. Mathews
ASSOCIATE SECRETARY,
DEPARTMENT OF EDUCATION, GENERAL CONFERENCE

JESUS prayed, "For their sakes I sanctify myself." [1] We too must remain consecrated "for their sakes." Could anything be so deserving of consecrated shepherds as the lambs of the flock? Jesus asks, "Lovest thou me?" Then, "feed my lambs." [2] He has given us the gift of teaching; He has appointed us undershepherds of the flock.

Oh, how these lambs need understanding shepherds! So few have understanding parents; so few have friends and companions whose influence is uplifting. They are living in a time of special peril for their souls, and Satan uses every opportunity to weaken their characters and unfit them for God's work. What poses a still greater responsibility for the spiritual guides of these boys and girls is that "the young are ignorant of the many dangers to which they are daily exposed." [3] Like the shepherd who knows of the dangers lurking in the thicket toward which his sheep are innocently moving, so we have learned of the specious temptations and perils facing our youth. They are not aware of them, but we are! If these precious lambs are lost, what a terrible price some shepherds will have to pay!

Commenting upon the work of the Christian teacher, Mrs. E. G. White wrote: "This work is the nicest, the most difficult, ever committed to human beings. It requires the most delicate tact, the finest susceptibility, a knowledge of human nature, and a heaven-born faith and patience." [4]

In our human strength and wisdom we are no match for Satan and his many agents, who are determined to kidnap the children of the church. Education, maturity, and experience are helpful, but not enough. This is a *spiritual* work. "The weapons of our warfare are not carnal, but mighty through God to the pulling down of strong holds." [5] Not to the strong, not to the brilliant, not even to the experienced, but to the consecrated—yes, to the teacher who constantly abides in Christ—will come the ability for successfully accomplishing this "most difficult" work.

The better the man, the better the teacher. In the hour of test or conflict or great opportunity he will find that the thoughts, words, and acts of his past life are arrayed either for or against him. At that crucial moment every self-denial he has made, every Christian forbearance he has shown, every resistance to sin and temptation, will serve to strengthen his arm and give conviction to his voice. Contrariwise, every evasion of duty, every indulgence of self, every compromise with evil, and every unworthy thought, word, or deed will be there to take the light from his eye, the power from his blow, the ring from his voice, and the joy from his heart. A teacher's conscience should always be as clear as good flying weather!

Because the lambs are so needy, because the task is so difficult and so important, and finally because all God's wonderful promises for help are made only to those who daily consecrate themselves to God, withholding nothing; therefore, it is paramount that we follow the daily practice of the Great Teacher: "For their sakes I sanctify myself."

[1] John 17:19.
[2] John 21:15.
[3] *Testimonies*, vol. 3, p. 373.
[4] *Education*, p. 292.
[5] 2 Cor. 10:4.

The Working Policy

Floyd O. Rittenhouse
DEAN,
SOUTHERN MISSIONARY COLLEGE

THE roots of constitutional government lie deeply embedded in the history of the long struggle of mankind to be free. The concept that government should be limited by fixed laws dates back at least eight hundred years. This principle of a government of law, in contradistinction to a government of men, produced the American Constitution—a document whose sources include the British common law, the Magna Charta, the Bill of Rights, and the writings of Locke and Blackstone and the French Encyclopedists. Certainly the acceptance of a written compact to stand as the basic law constitutes a milestone in the history of civilization. To freemen it is a priceless possession, a rich heritage which passed to America in early Colonial times and was, by the Revolutionary years, thoroughly fixed in the constitutions, laws, and usages of the several States. More significant still, as far as religious liberty is concerned, it became a basic tenet of the political philosophy of our forefathers.

In exactly the same way that an enlightened nation which prizes and protects individual liberty, and which proceeds according to orderly processes, requires a fundamental constitution; so does a complex and expanding institution, such as a college, need a basic and intelligible statement of its fundamental principles, objectives, and practices of operation. This statement constitutes the working policy.

To appreciate and properly to implement such a working policy, the institutional officers must embrace two theories of institutional administration. First, they must believe in democratic rather than dictatorial processes. Second, they must accept the viewpoint that greater benefits derive from a rule of law than from a rule of man. These two principles are inherent, and cannot be disregarded except at the certain detriment and injury to the institution concerned.

Along with these twin principles of institutional administration stand two educational principles which, though questioned by some, appear essential to an enlightened statement of policy. One is the theory that a college exists primarily for the benefit of its patrons, the students. Teachers need to be reminded that they teach students, not subjects, and that the college is successful only insofar as it serves the highest interests of its students. The other educational concept is that instruction and learning are prime objectives and must have first place in the institution. This means that the instructional program will have priority, will be accorded the right of way. It means interest in and emphasis upon what takes place in the classroom and during the so-called study hour. It means that the work of the president, the dean, the business manager, the registrar, and other officers—indeed all administrative functions—are but auxiliary services to support the prime purpose of instruction and learning. It means special attention and generous grants to such auxiliary services as the library, laboratories, and other instructional aids.

The working policy should reflect the particular desires and intentions of the college constituency. It should be in full harmony with, and, in a sense, grow out of, the institution's articles of incorporation and bylaws. Although various

methods have been employed to provide a working policy, it would seem appropriate that the initial step to the development of such a fundamental document should be by vote of the college board of trustees. A committee of the faculty, preferably of not more than seven members, nominated and elected by the staff in regular session, might well be entrusted with the task of drawing up the preliminary draft. Several copies of this draft should then be made, and each officer of the college requested to read it carefully and to propose additions and alterations in writing. The committee might then hold several additional meetings for purposes of revision, after which the corrected draft could be turned over to a committee consisting of the divisional heads or of seven elected departmental heads, with the president or dean acting as chairman. When this committee completes its work of reading and revision, several copies should be placed on reserve in the library for the exclusive use of the staff. All members should be encouraged to read this draft carefully and to make suggested changes in writing to the president. After a reasonable time (a month or six weeks) these additional suggestions should be considered by the divisional committee, and a final draft developed for the formal approval of the faculty, which at this point is not difficult. Several copies of the revised draft should then be read by a number of interested board members, especially by the chairman, the secretary, and the educational secretary. Board discussion and approval follow. Then, and only then, should the working policy come into operation.

Since the working policy is a living document, as is any other active constitution, provision must be made for revision and amendment. Ordinarily, not less than three or more than five years should elapse between occasions of restudy and revision. A small committee selected by the staff might properly take the task in hand, requesting suggestions from every member. Final approval of changes by the staff and board should follow.

If the extended procedure indicated here is largely followed, the officers and teachers of the college will be fairly familiar with the working policy by the time it is approved and goes into operation. Every member should be provided with a bound copy and urged to study it and to refer to it frequently. As this is done new confidence and certainty will be evident. Teachers and officers will no longer hesitate to function boldly in areas now clearly assigned them. Others will no longer dabble uncertainly in "twilight zones" of doubtful authority. A spirit of cooperative teamwork will develop, and members will discover that "good fences make good neighbors." A good working policy points out the over-all objectives and indicates clearly how each one can properly serve to make the whole program effective.

As a part of the orientation days at the opening of each school year, a copy of the working policy should be presented to each new staff member, with the assurance that the document is in effect and that he should familiarize himself with it and work according to it.

To attempt to indicate all the items that might properly be included in an effective working policy is beyond the scope of this article. A brief suggestive outline, however, appears herewith.

Outline for a Working Policy

1. Table of Contents.
2. Introduction.
3. Articles of Incorporation.
4. Philosophy and Objectives.
5. Chart of Organization.
6. A Code of Ethics.
7. Policies.
   - *a.* Academic freedom.
   - *b.* Recruitment and appointment.
   - *c.* Sick relief and retirement.
   - *d.* Sabbatical leave.
8. The Board of Trustees.
   - *a.* Membership.
   - *b.* Functions.
   - *c.* Officers.

Please turn to page 29

How to Make Arithmetic More Meaningful

Ethel Johnson
SUPERVISOR OF SCHOOLS,
OREGON CONFERENCE

TOO many boys and girls learn to manipulate figures in arithmetic classes without fully understanding the meaning of the numbers with which they are working or the reason for doing what they are doing. It is difficult to understand that children will make more sure and sound progress later if they are first given many concrete experiences with numbers, because at first they readily learn and glibly repeat in parrot fashion such combinations as "2 and 2 are 4." But did they discover that for themselves? or did someone tell them? Did they learn the "twoness of two" and the "fourness of four" by manipulating objects? Did they learn that one gets four objects when he combines two groups of two objects? Did they have the fun of separating four objects into two groups of two each? Only as boys and girls experience numbers and combinations in actual counting and manipulative demonstrations are they learning the value of the numbers and the meaning of addition and subtraction, and later of multiplication and division.

The child who is expected to learn too many combinations too fast becomes confused in trying to remember them, and resorts to some method of counting to obtain the answers. Instead of handicapping the child by expecting him to read, copy, and solve written combinations before he fairly understands the significance of the numbers, the teacher should lead him gradually through—

a. The counting and grouping of such objects as balls, blocks, marbles;
b. The counting of pictures of balls, et cetera, arranged in groups;
c. The counting and grouping of more abstract things, such as toothpicks or colored sticks;
d. The mental solving of many concrete problems that confront the child in play or school.

Only after a child has such a background is he ready for the task of reading, copying, or solving such simple-to-us but difficult-to-him problems as

$$\begin{array}{r} 3 \\ +2 \\ \hline \end{array} \text{ and } \begin{array}{r} 4 \\ +3. \\ \hline \end{array}$$

Do the boys and girls understand the "magic ten" of our counting system? Until they do, all work with numbers of ten or above is more or less meaningless. Have children make many bundles of ten toothpicks, fastened securely with string or rubber bands. Then show them how to count the "magic ten" way by picking up individual toothpicks one at a time while they say, "one, two, three . . . nine." Tell them they are never to have ten separate toothpicks in their hands. When they are ready to say "ten" they are to drop the nine toothpicks and pick up a magic bundle of ten and say "ten." While holding this in one hand they are to pick up another single toothpick and say "eleven," and so on until they have nineteen in their hands. Show them that when they say "twenty" they are to drop the nine loose toothpicks and pick up a second magic bundle of ten. Show them that ten is one bundle of ten and no ones, and is written like this: "10." Show them that twenty is two bundles of ten and no ones: "20." Similarly, show that twenty-one is two bundles of ten and one single toothpick. Pick up different numbers of bundles of ten and single toothpicks, and have the children tell what number is represented. Also give them a number and have them pick

up the correct number of bundles or single toothpicks. For additional drill use pennies and dimes in the same way.

The understanding of our counting system will help children understand the movement of numbers on speedometers; the hands on the different dials of electric and gas meters; the second, minute, and hour hands on a clock; decimal fractions and denominate numbers. In each case they learn that so many of a smaller unit make one of the larger. Understanding this will help clarify our number system.

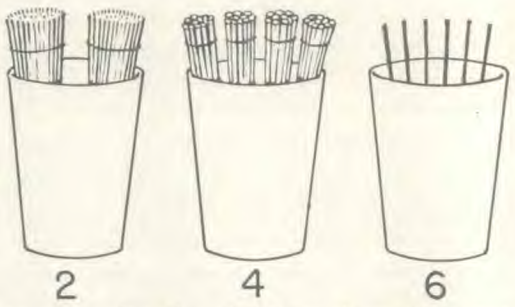
After children understand the value of each figure in two-place numbers, they can more readily learn to add 8 and 4 and see the significance of the answer. Have them pick up the 8 single toothpicks and then the 4. Show them they have enough toothpicks to make one bundle of ten and have two single ones left. This will help them to understand that they must, in problems like this, write their answer with the two in the one's column and the one in the ten's column:

$$\begin{array}{r} 8 \\ +4 \\ \hline 12 \end{array} \quad \text{and not} \quad \begin{array}{r} 8 \\ +4 \\ \hline 1\ 2 \end{array} \quad \text{or} \quad \begin{array}{r} 8 \\ +4. \\ \hline 12 \end{array}$$

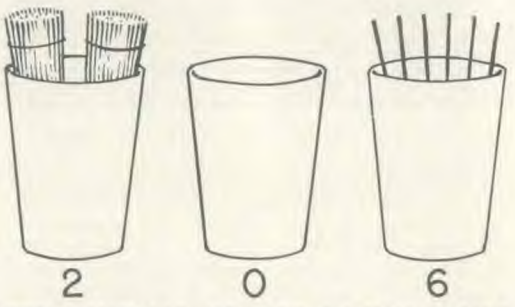
Teaching the child to place each figure in the proper column because of its place value is fundamental, and is far more meaningful than telling him to write them in straight lines or columns.

The teaching of borrowing in subtraction is simplified if a child has acquired this background of understanding. Using the toothpicks again, show a number like 37 with the three bundles of ten and the single toothpicks, placing the bundles in one cup or small glass and the single toothpicks in another. Have a child take away four toothpicks and tell how many are left. Do this with several examples in which borrowing is not involved. Then have a child show a number like 32 with toothpicks. Ask him to take away 7. When he sees that he cannot take seven from the two, show him that he may borrow one of the bundles of ten, remove the string, and add the ten to the two he already has. It is easy for him to see that he now has twelve and he can take seven from them, leaving two bundles of ten and five single toothpicks, or twenty-five. All this is done orally, time and time again, with no thought of putting it down in written form until the child sees that when you borrow in subtraction the "1" you borrow from ten's place makes ten to add to the ones. After the child understands the process he sees that the written form is a short-cut way of showing what he did with the toothpicks. Then as he works with the figures, they and the process mean something to him.

Just as children learned that different two-figure numbers are made up of tens and ones, so they learn the "ten bundles of ten." They, not the teacher, should have the experience of making bundles of a hundred by tying together ten bundles of ten. By using three small glasses

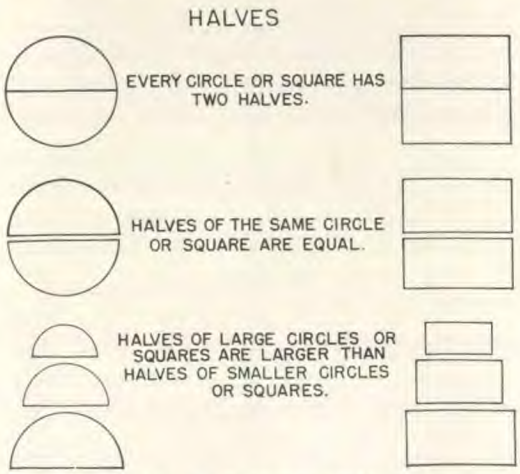


or cups, let the children show different three-figure values—as two hundred forty-six—by using the toothpicks. It is easy for them to see, when the number 206 is made with toothpicks, that there are no tens and that we need some way of showing this in arithmetic. Zero is a



place holder, and we use it to show that there are no ones or tens or hundreds, as the case may be. Have children make different three-figure numbers by using the toothpicks; then have them write these three-figure numbers, and tell the meaning of each figure. When a child first learns to say or read three-figure numbers he should learn that there is no "and," "nd," or grunt after the hundred. A child usually will not add these if he is taught to pause after he says "hundred" before he says the rest of the number.

The addition of 1/4 and 1/4 would be no more difficult for children than 1 boy and 1 boy if the "fourth" were as concrete to them as "boy" is. Fractions are difficult for children to add, because we expect them to manipulate *symbols* for fractions before they understand the meaning of fractions or the method of representing them. Before children are asked to do the fraction problems in their books, they should learn the value of fractions and how to add and subtract them, by using something to make fractions concrete. By using measuring cups or spoons, the children will learn many basic fraction concepts: that one half and one half make a whole; that a third is smaller than a half; that two fourths make a half; and so on. By cutting paper circles and squares they can learn and show certain basic facts.



Then to help the children to understand the process of adding and subtracting fractions and reducing fractions to lowest terms, color some paper plates green, cut them in halves, and label each one 1/2; color some red, cut them in fourths, and label each 1/4; color some yellow, cut in eighths, and label them 1/8. Plain white paper plates are used to hold the parts. Now have a child add 1/4 and 1/4 by placing two of them in a white paper plate. Show them that both of the fourths can be exactly covered by a piece labeled "1/2." Remove the two pieces labeled 1/4, and leave the 1/2 in their place. This merely indicates one of the many problems the children can do in adding and subtracting fractions, and later mixed numbers, before they are asked to write the problems including fractions. Understanding the value of the fraction and the meaning of the different processes should always precede written work.

It is difficult for children to realize that we have three ways of expressing a part of a number or of a whole. We may use common fractions, decimal fractions, or a per cent to tell what part of the whole we mean. Have two children hold a long string or ribbon between them. Have others indicate a half of it, one fourth of it, one tenth of it, one hundredth of it. Tell them that we may speak of one hundredth of an object as one per cent of it. Have them show one per cent of the string, fifty per cent of the string, one hundred per cent of the string. Show them that just as 78% of the string is a large part of it, so 78% of any number is a large part of it. Later the string is good for showing the difference between 1/2 and 1/2%. In addition to having the children use the string, have them use squared paper that is ten units long by ten units wide, to show the comparative size of 100%, 50%, 1%, and others.

The only way a child can really understand our units of measure is by han-

dling them. No amount of drill in memorizing tables like—

2 cups equal 1 pint
2 pints equal 1 quart
4 quarts equal 1 gallon

can take the place of having the children discover these facts for themselves by using the measures involved. Let the children bring different-sized cartons and cans to school, and see which ones hold a cup, which a pint, and so on. Charts like the following show the relation between the different units and will help the child to see that when he changes a large unit of measure, like gallons to

LIQUID MEASURE

1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP	1 CUP
1 PINT		1 PINT		1 PINT		1 PINT		1 PINT		1 PINT		1 PINT		1 PINT	
1 QUART				1 QUART				1 QUART				1 QUART			
1 GALLON															

quarts, he will have four times as many of the smaller unit, so he must multiply by four. Similarly, when he changes small units like quarts to gallons he will have only one gallon for every four quarts, so he would divide by four. In other words, when one changes large units of measure to smaller ones, he multiplies; when he changes small units of measure to larger ones, he divides. Children should discover such generalizations and learn to apply them to all units of measure, whether of length, area, time, or dry or liquid measure. Such generalizations should help older children to understand that one always multiplies to change gallons to quarts, whether 8 gallons, $\frac{2}{3}$ gallon, or .5 gallon.

When a child uses the expressions square inches, square feet, square yards, 144 square inches equal 1 square foot, and 9 square feet equal 1 square yard, there is nothing about the terms themselves that reveals their relative size. Let the child cut some pieces of paper that are an inch square, a foot square, and a yard square, and he begins to see the significance of the terms. Let him cut enough square inches to cover the square foot, and enough square feet to cover the square yard. Let him also make several square yards from pieces of newspaper, and let him see what it means when you say a certain hall floor has so many square feet or square yards.

The contrast between a cubic inch, a cubic foot, and a cubic yard is even greater. Have the children find a box that is as near a cubic foot as possible. Have them see what a small part of the box is filled when they put a dozen or so cubic inches into it. For older children, the cardboard carton that is a cubic foot in size can be made temporarily waterproof by putting Scotch tape on the corners. Let the children take this out on the school ground and discover for themselves how many gallons it will hold. When they see the gallon measure in comparison with the cubic foot, their guess as to capacity is not accurate unless they have had previous experience.

How difficult it usually is for a child to remember that the circumference of a circle is a distance, and that it always bears a certain relationship to the diameter. Have a variety of saucers, plates, lids, pie tins, or wheels. Show the children how one can quickly find the distance around a circle in this way: using a tape measure, get the length of the diameter. Without referring to the object being measured, fold your tape measure so you have three times the original length and then, by guessing, add a seventh of the original length. This demonstrates that the circumference of a circle is three and one-seventh times the diameter. Instead of asking the children to find the circumference of a circle by attempting to use a formula and manipulating numbers before they understand the process, let them find the area of different-sized circles and plates by using the tape measure. Also show them that if you knew the radius of a circle was 4 inches, you would first measure off the

Please turn to page 30

Undergraduate Missionaries

Naomi K. Pitman, M.D.
RESIDENT IN PEDIATRICS,
WHITE MEMORIAL HOSPITAL

A GROUP of medical students studying and vacationing in Mexico under the auspices of the School of Tropical and Preventive Medicine of the College of Medical Evangelists have solved part of the problems of future medical evangelists. Some of us retrospective missionaries can well be envious of the opportunity these young people have had. It has been expressed by many returned missionaries that it would be an excellent thing to provide orientative courses before mission service begins. In the past, because of urgent need, doctors have gone to foreign countries with no specialized training in tropical medicine, no clean-cut concept of an over-all public health program, and sometimes without the vaguest idea of the social usages of the country.

The group who went to Mexico last summer spent three weeks in the field station at Boca del Rio, and one week at the Tropical Medicine Institute in Mexico City. The students motored down and back at a minimal expense.

Specifically, the course offered the following concepts of mission life:

1. An introduction to a foreign language.
2. A well-organized course in tropical medicine which included:
   a. Public health programs with actual participation in disease control, such as mosquito control, the DDT-ing of houses, et cetera, and a very specific emphasis on nutrition.
   b. Laboratory demonstration of tropical diseases.
   c. Actual demonstration of patients.
3. Professional relations in a foreign country.

The students were instructed by the best in the medical profession in Mexico. They gained a concept of the work that our own Government is doing to help the Mexican Government in its public health program. They were introduced to Dr. Thomas Parran, former Surgeon General of the United States, and also to Mr. Walter Thurston, United States ambassador to Mexico.

4. Personal contacts and interviews with the leaders of our denominational work in Mexico. Emphasis was placed on the interrelationship of the different branches of our organization, such as the ministerial, radio, educational, and medical work. The opportunities the denomination offers and possibilities for self-supporting work were discussed. The peculiar difficulties of that field were frankly stated, and the students had opportunity to worship with the Mexican brethren in their native churches.
5. A knowledge of the political and religious policies of Mexico.
6. An idea of the differences in customs and psychology of the people of a foreign country.
7. The great need of these people in comparison with our own land of plenty.
8. A concept of the physical problems involved in living in a foreign country, such as housing, clothing, and food.

Two dietitians and the wives of several of the students were with the group. They were able to see the types of food available and the methods of sterilization necessary to prepare the food in a safe way.

The students stopped at our hospital in Montemorelos, and were able to see this missionary project at work. They heard Doctors Hersel Butka and Kenneth Fisher tell of the patients they treat. For the first time in denominational history undergraduate medical students saw a mission hospital, how it is staffed, under what conditions it functions, and became acquainted with denominational mission problems.

The students were able also to glimpse some of the glamour of mission life. Consider, for instance, the warm waters of the Vera Cruz beach and the thrill of diving under coral reefs for a glimpse of colorful little tropical fish. Then there was the day when they climbed from a river launch to the jungle shore and, after being greeted by a boa constrictor, explored the old sugar mill, which was inhabited by thousands of bats. The climax of another busy day spent on a public health tour and in horseback riding

Please turn to page 28

Recruiting for Elementary Teachers*

George S. Belleau
EDUCATIONAL SUPERINTENDENT, OREGON CONFERENCE

WHAT can we as teachers do to recruit our students for the teaching profession? At what age and in what grades do students decide to become teachers? It is my purpose here to answer these two questions, partly from investigations conducted by others, partly from my own research.

Of those students who were preparing to teach 405 were asked, "What experience have you had which caused you to want to become a teacher, or contributed to your fitness to become a teacher?" Following are the six experiences that predominated in influencing most of these young people to take up the teaching profession:

1. One hundred forty-three had previous experience in church work or scouting.
2. Sixty-seven liked children.
3. Fifty-two had had encouragement toward teaching through personal experience in school.
4. Forty-seven had substituted for or helped the teacher at school.
5. Thirty-six had previous experience in teaching in the armed services.
6. Twenty-five had served as leaders for non-church youth groups.

Don A. Orton, author of the article in which this question and these answers are set forth, calls the attention of his readers to the fact that 60 per cent of these future teachers were already more or less acquainted with teaching.[1] He then asks whether we as educators have realized the value of such awareness. In studying the replies can we see the possibilities for recruiting that we have?

A group of 103 college women were asked why they were choosing teaching as a career. Each gave several reasons, which are summed up as follows:

1. Ninety per cent were interested in children and young people.
2. Opportunity in the summer for travel, study, and relaxation appealed to seventy-five per cent of them.
3. Seventy-three per cent cited a reasonable living, sureness of a job—security—and the prospect of sustentation or pension after they had taught for a number of years.
4. Fifty-one per cent listed the lifelong opportunity to learn.
5. Forty-one per cent were influenced by the enthusiasm of former teachers.
6. Twenty-three per cent listed service to mankind.[2]

In September, 1947, the Laidlaw Brothers, Chicago textbook publishers, offered prizes for the three best papers on "How I, a Teacher, Can Inspire My Pupils to Enter the Teaching Profession." About one thousand papers were submitted. Miss Vivian Weaver, of Red Level, Alabama, won first prize with the statement:

"Many are prevented from entering the profession by the often-heard remark, 'A teacher's work is never done!' I can build up the profession by complaining less, and praising my job. I must pull my share of the load, be proud that I am a teacher, and tell people about it."

"The majority of the teachers who submitted entries feel that the example set by teachers is in itself the most important single factor in guiding young people to teaching."[3]

These one thousand teachers claimed that they chose the teaching profession because (1) they were influenced by a former teacher; (2) their determination to become teachers began in the elementary grades—frequently the decisions were made in grades one to three; (3) the dress and appearance of teachers were strong factors.

The second reason given challenged me. Year after year I have met the freshman young women coming to college,

* First of a series of three articles on teacher recruitment.

and have done my best to influence some to take up teacher training. Was the elementary school the real recruiting ground for future teachers? Could it be possible that children made decisions for life in grades one to three? Last July, I decided to investigate for myself.

During the summer session I sent a letter to the director of elementary teacher training at Walla Walla College, asking her to have the teachers in training in her classes write their replies to the following questions:

1. How did you become interested in teaching?
2. What first started you on the way to teach?
3. When did this first happen in your life?
4. In other words, who or what influenced you to want to teach?

The same questions were sent to a group of actual teachers. All told, 191 teachers replied, and their answers are summarized as follows:

1. One hundred thirty-four were influenced to become teachers by former teachers.
2. Twenty-two decided to become teachers before ever attending school.
3. Thirty-five were influenced by outside sources.

Formerly I had gone to the college to recruit teachers. Last winter I recruited in our academies, and had better success; but I was not yet ready for the revelation that in our elementary schools the youth are making their decisions to be or not to be teachers. The 134 who were led by their teachers to take up the teaching profession were influenced by teachers at the following levels:

1. Eighty-two by elementary school teachers.
2. Thirty-one by high school teachers.
3. Ten by college teachers.
4. Eleven by teachers outside the classroom, such as relatives and friends.

The best recruiting in the elementary field was done by the first-grade teachers, since seventeen became teachers because of their first-grade instructors. Sixteen became teachers because of their seventh- and eighth-grade teachers. Thirteen became teachers because at least one parent was a teacher. Twenty-two decided to become teachers before ever they attended school. Surely credit for this must be given to the mothers—the children's first and most important teachers.

This is how the forty-four high school students were recruited for the teaching profession while they were in high school:

1. Twenty-one were recruited by their high school teachers.
2. Two had substituted for the teacher, and had fallen in love with teaching.
3. Six saw the need for teachers while attending high school, and decided to make teaching their lifework.
4. Three were influenced by their mothers during their high school days.
5. Eight were influenced by the educational superintendent of their conference during their high school days.
6. Two were teachers in the junior division of the Sabbath school; one was a teacher at Junior camp; one was influenced by the Teachers of Tomorrow Club.
7. Ten were influenced by college teachers while still in high school.

The outside sources that influenced the thirty-five to become teachers were:

1. Fourteen found an opening for denominational work in our church schools when they were graduated from college.
2. The Sabbath school recruited six.*
3. The other fifteen gave miscellaneous reasons.

Apparently, then, our elementary teachers possess the key for recruiting teachers for the elementary field. No greater service can be given by our teachers than to take time to influence the brilliant and gifted students—the leaders in their schools—to take up the teaching profession. That is building for tomorrow's world. I recognize that, as an educational superintendent, I must recruit even if another reaps the benefit. My responsibility to God and to the future children of our denomination demands that I do my best to solve the problem of teacher shortage. Such a course is not putting off the coming of the Lord. I am to occupy till He comes. As a faithful steward I must plan the future of the work even while believing that the Lord will return before these first graders become teachers.

How teachers can recruit teachers, while teaching, will be discussed later.

---

[1] Don A. Orton, "Why Do They Want to Teach?" *Phi Delta Kappan*, vol. 30, no. 8 (April, 1949), p. 343.
[2] J. Marc Jantzen, "Why College Students Choose to Teach," *Phi Delta Kappan*, vol. 28, no. 8 (April, 1947), p. 334.
[3] "Teachers on Teacher Recruitment," *NEA Journal*, vol. 37, no. 7 (October, 1948), p. 428.

What High School Students Think About Teacher-made Examinations

William Bender, Jr., and Robert A. Davis
UNIVERSITY OF COLORADO

Teacher-made tests appear to be a desirable and essential aspect of the school's program of educational evaluation. The authors present data on what students think of such tests.—EDITOR.

THE purpose of this study is to survey student opinion regarding testing practices in typical Colorado secondary schools. The data used were gathered by means of a questionnaire. One thousand and forty students who were enrolled during 1947-48 in forty-one different secondary schools of varying size, representing assorted geographical locations, contributed responses to the survey. Public, private, and parochial schools participated to an extent that is proportionate to their incidence.

Questions asked in the survey were so phrased that objective responses were obtained concerning four aspects of testing: (1) construction and types of tests used, (2) administration of tests, (3) uses of tests, and (4) evaluation and appraisal of test results. Students were asked their opinions of "what is being done." Responses were at first tabulated for each school and for each grade-in-school. Midway through the tabulation, it was decided that student response by grade varied too slightly to warrant separate analysis by grades and that part of the procedure was discontinued. It was apparent that the findings of the study would be more useful if they presented an over-all picture of student preferences rather than an analysis of such preferences in respect to individual schools.

Construction and Types of Test

The findings indicate that students attach little importance to the order in which material is presented in a test. There is a difference of opinion concerning the order of arrangement of test materials. On one hand, it is held that the teacher should *test* in the same logical sequence that the material involved was *taught;* and on the other hand, it is held that an irregular arrangement of test items more effectively measures the student's command of the material studied. In the first instance, the theory is that logical presentation, by mirroring teaching, helps the student build a more authentic picture of the course. For this reason, it is maintained that logical presentation is probably the superior method to employ when emphasis is being placed on the use of tests as instruments of teaching. But the students themselves are not greatly impressed by any possible value that may result from such an arrangement. Forty per cent stated a preference for the same logical order in which the material was taught. Only 20 per cent preferred a "mixed" arrangement. The remaining 40 per cent indicated no preference. Thus although twice as many expressed a preference for an arrangement of items that paralleled original presentation, only one-fifth more of all the students reporting preferred logical arrangement.

There is decided student preference for tests that stress *application* of knowledge in comparison with those that depend on memory for facts and details. Seventy per cent prefer questions that test problem-solving ability, whereas only 30 per cent prefer questions that concern facts and figures.

Students believe that true-false and multiple-choice tests provide the best opportunity for successful "guessing." These were the test forms selected when the students were asked, "What type of test would you prefer to take if you had no opportunity to study for an examination?" It was found that 49 per cent prefer tests that consist of multiple choice; 23 per cent prefer true-false; 15 per cent, matching; 7 per cent, essay; 4 per cent, completion; and 2 per cent, problem types of item.

When the degree of preparation is altered and inquiry is made concerning the type of test that will show knowledge to the *best advantage,* true-false and multiple-choice items regress to a position far down the list. Essay-type tests take the lead and completion tests rank a close second in student preference when they are well-prepared in the subject. Thirty-eight per cent indicate a preference for essay type, 29 per cent for completion, 15 per cent for problem, 9 per cent for multiple choice, 6 per cent for true-false, and 5 per cent for tests composed of matching type items.

We find from their comments that well-prepared students prefer to state their knowledge in their own words. It would appear that, having assimilated information in a manner that is uniquely related to their own experience and interests, students desire to restate this knowledge in their own terms rather than in a definite acceptance or rejection of the teacher's phraseology. Preference for essay and completion tests is further supported by the findings of the survey in two other respects. Students were asked, "What type of test would cause you to study hardest?" Tabulation of their responses placed the essay test first and completion test second. Analysis of this finding showed that 43 per cent indicated the essay; 27 per cent, completion; 18 per cent, problem; 6 per cent, true-false; 3 per cent, multiple choice; and 3 per cent, matching type.

Essay and completion examinations again led the field when students selected the tests for which "cramming" would be most successful. In this situation the problem-type test ranked a close third. It is significant that a majority of the students feel that it is unnecessary to "cram" for true-false, multiple-choice, and matching type of examinations. (See Table I.)

Table I

Per Cent of Students Who Consider Cramming Worthwhile in Order to Prepare for the Type of Test Indicated

Type of Test	*Worthwhile*	*Not Worthwhile*
True-false	30%	70%
Multiple-choice	35%	65%
Completion	63%	37%
Problems	56%	44%
Matching	40%	60%
Essay	60%	40%

In order to obtain a more complete picture of their opinion, students were asked to state their general preferences concerning different types of tests. No specific criteria were suggested upon which such a selection might be made; hence, it may be assumed that the resulting tabulation indicates the extent to which the participants associate ease of accomplishment with the test forms mentioned. Multiple-choice tests rank first; completion tests, second; matching and true-false tests are tied for third; essay tests, fourth; and problems, fifth.

Administering Tests

1. *Effect of advance notice on testing.* One of the first matters concerning which students were questioned had to do with the desirability of giving notice preceding tests and the length of time that such notice should be announced in advance of the test. The answers show that 97 per cent of the students desire advance notification. Fifty-nine per cent prefer two or three days' notice; 22 per cent prefer a week; 14 per cent, a single day; 3 per cent desire no advance notice; and 2 per cent prefer to be notified two weeks in advance. One tenth grader in the 3 per cent group not favoring notifi-

cation, supports her view by saying, "Surprise tests catch those who don't do their own work."

"A surprise test is very unwise," counters another tenth grader, "because some students need more time for study than others, and it discourages students to flunk."

An eleventh grader who favors 2 to 3 day advance notification wrote, "If too much time is given for review and study, the student is apt to memorize. School should be for learning . . . not memorizing."

Another aspect of testing implies that the student, in order to study economically and learn effectively, should be able to anticipate within reasonable bounds the material each test will cover. A tenth grader, who apparently had faced this problem from both viewpoints, wrote, "The teacher should give us an idea of what is going to be on a test. Many times the things I thought unimportant were always asked. Once or twice I've had a test when I knew beforehand what it was going to be about, and I could tell the difference right away."

If it could be shown that students generally prefer easy "surprise" tests concerning which no one has had advance notice it might be concluded that they looked upon testing mainly as a means of measuring knowledge. On the other hand, if it could be shown that students favor more difficult tests with time for study and review, there would be reason to believe in the existence of an opinion among them that tests serve to stimulate learning. The findings in this respect decidedly favor the latter view. Almost three-fourths of the students who contributed responses to the survey prefer more difficult tests. Seventy-two per cent indicated a preference for more difficult tests with ample advance notification as compared to 28 per cent who prefer easier, unannounced tests.

By the same token, the student who is content to learn only the score that he has made on an examination may be considered to be less interested in learning from the examination than is the student who wants to see and check his corrected paper. In the latter instance, the student generally is inclined to regard his errors critically and to exhibit eagerness to achieve sufficient additional learning to avoid repeating them.

Ninety-four per cent of the students who contributed responses in the survey indicate that they are in favor of "getting back the (examination) paper with grade and corrections on it." Only 4 per cent are content to have their test paper returned with only the grade and no corrections on it.

A tenth grader observed, "After you make a mistake on a test you won't make that same mistake again." A 15 year old girl writes, "Most students, if their papers are returned, will try to correct them." Such an effort is in itself an aid to the student. She goes on to say, "I seldom forget a question after I have missed it on a test. It seems to stick with me."

Clearly, learning involves judgment of relative importance. A teacher who resorts to constructing test items based on the minutiae of a course simply "to put in some hard questions" is losing sight of some of the major purposes of both learning and testing. *To the student, that which is tested is important.* Testing on non-essentials tends to bewilder the learner. In this respect the survey reveals that a healthful condition exists in the schools being considered. Ninety-six per cent of the students participating indicate that they had a clear understanding of what most tests were to cover during the previous term.

2. *Frequency of testing.*

How frequently should tests be given? A negligible percentage of students express willingness to pass or fail an entire course on the basis of the mid-term and final examinations alone. More than 50

per cent, however, favor a test each week, and the remainder are divided almost equally between a daily test of 5 to 10 minutes duration and monthly tests lasting a full hour. Fifty-three per cent preferred weekly tests; 23 per cent, daily; 20 per cent, monthly; and mid-term and final tests alone were preferred by only 4 per cent.

Approaching the subject from a negative aspect, a boy of 17 remarks, "If large mid-term or final exams are the only type given, the student, even after much study, cannot remember all of the material." A twelfth-grade girl notes that, "Daily tests are an excellent means of assuring study." A tenth grader also prefers daily tests because, ". . . you have a chance of putting into use what you have learned." Another girl who favors the daily arrangement writes, ". . . because then we don't get so worried over a test. If we don't get a good grade one day, the next day we can do better."

"Daily tests do more to encourage regular preparation and study," writes a twelfth grader. "If the teacher gives an exam at the end of every six weeks," explained a junior girl, "she should give a quiz every week and take the exam questions from the quiz questions."

Using Tests

Students were quizzed regarding their attitudes toward the actual use of tests. More particularly, the question for which an answer was sought by this survey was: Do students regard tests as a means of learning a subject, or do they regard them as a necessary annoyance incident to, but not affecting, the learning process?

The inquiry was developed in two ways: first, by indirect questions on such topics as the student's attitude toward testing in general, scores received on learning efforts, getting corrections on wrong answers, etc., all of which, when answered favorably, would indicate an underlying desire to learn from the test; and secondly, by a direct question, "Do tests and examinations help one to learn?" that was asked at the end of the questionnaire. Returns indicate that most students have a sufficiently wholesome attitude concerning tests to serve as groundwork upon which important psychological principles associated with using tests as learning instruments may be based and made effectively operative.

Only 15 per cent indicated that fear of tests prevented them from doing their best work. Of these, one twelfth grader complained that "The test that makes the students worry is the one based on the teacher's opinion." Balanced against this group are the 18 per cent who actually welcome tests for the opportunity that they afford to demonstrate their knowledge. Twenty per cent indicated that anticipation of a test stimulates them to do good work. Between these extremes there are 47 per cent who admit worrying about examinations, but not to an extent that such worry interferes with performance.

The survey appears to indicate that most typical modern testing affords a sound emotional stimulus to the student. Although 15 per cent, by their own reports, become too tense or too agitated to do their best work, these individuals are found to be distributed with a fair degree of uniformity among the various school systems canvassed. Their difficulties may be attributed as readily to individual personality problems as to defects in prevailing testing practices.

Evaluation

The over-all picture that the survey reveals is favorable to the use of tests as learning instruments. It is in connection with methods and standards for evaluating tests, and the preferences of students in respect to their use as learning instruments that the educator is most importantly concerned. *Methods* and *opinions* affecting the construction and administration of tests must be considered in com-

bination with the *purposes* for which tests are given, in order to arrive at adequate criteria for the appraisal of tests as instruments that should contribute vigorously to the promotion of learning. The present investigation, however, is directed mainly toward somewhat less complex aspects of evaluation; it is limited to a study of grading practices. Selection of this aspect for emphasis is based on evidence that students work for *grades* in more instances and generally with far greater energy than they work for *knowledge*. Acceptance of this point of view calls for frequent appraisal of learning effort, in terms of the grades that students earn and their effects on student performance, more strongly than attention is called for at present in many other areas of classroom work.

This condition influenced the wording of the questions presented to the students: "How should tests count in making up the final grade for a course?" The answers showed a strong, almost uniform preference to have all work in a course considered in connection with the final grade. Such an attitude supports the contention that students work for grades. It indicates that very few students care to do work for which they receive no credit. Although students recognize that different phases of their work vary in importance, they feel that assigned tasks are of sufficient importance to be graded. Here again is encountered the student attitude mentioned earlier in this report: "That which is tested *is* important."

The most controversial of the problems posed to the students concerned the advisability of correcting errors made on tests and returning these corrections to the teacher. Difference of opinion on this problem showed the respondents to be 49 per cent *for* and 51 per cent *against* correcting and resubmitting papers.

One boy noted that a test would not help one learn—"unless you corrected your mistakes." Another student's opinion, already noted, is that ". . . most students, if their tests are returned, will try to correct them." Students rightfully may expect to learn the correct answers before they leave the classroom on the same day that test papers are returned. In such event, it would appear superfluous for them to note the answers on their papers and return them to the teacher.

An indirect question that was used to reveal student desire to learn from a test concerned choice of the person whom they preferred to have grade their tests. Three alternatives were presented: *the student himself, another student,* or *the teacher.*

It was anticipated that a choice of *the teacher* would indicate strongly a desire to learn, inasmuch as the simple fact of rightness or wrongness might be indicated too superficially on papers scored otherwise. The teacher alone would be in a position to make an accurate assessment of the *degree* of rightness and wrongness involved. Ninety-one per cent of the students questioned prefer to have the teacher grade their papers but the reasons presented for their choices are varied. "I don't approve of students correcting their own papers; they are usually too lenient," is one comment. Others suggest that students are likely to be too strict; may not understand what they are grading; may favor their friends with good grades; or may cheat in their own or their friends' behalf. Ninety-one per cent prefer that the teacher grade the papers, 5 per cent prefer that another student grade them, and 4 per cent prefer to grade the papers themselves.

Analysis of the responses submitted emphasized several conditions prevalently affecting testing practices, particularly including the following: a highly competitive situation exists for grades in secondary schools; all students wish to be judged fairly and by uniform standards; and students desire to enter a test with no advantage or disadvantage to them-

Please turn to page 22

The Organization and Program of a One-Teacher Church School

Mae Carberry Bradley
ELEMENTARY TEACHER,
BUENA VISTA, VIRGINIA

THE best definition I have found for *organization* is, "The efficient carrying out of a scheme or plan." Probably this is nowhere more needed than in a one-teacher church school, where so much must be accomplished in a short time. It is not uncommon to have twenty or more children in six or even eight grades. Even though the standard for a one-teacher school is six grades or less, we may find more than six needing our attention. Occasionally a bright pupil can be placed a grade ahead, but never should a child who can do the work of his grade be put back. Although some churches may have the room and the means to employ an assistant teacher, if one were available, many would not; and surely we will not send a grade or two to public school to ease our program. Therefore, whatever grades are present become our responsibility. As assistants to the Great Teacher, we smile, pray, plan, and work.

We can be especially thankful for the alternation plan and for the helpful suggestions of our educational superintendents and supervisors from time to time. A few years ago a union educational committee gave me a priceless suggestion—that I use student help to ease the impossible load I was carrying. Although I had used pupil help before to a limited extent, that year I discovered that, if taught what to do, pupils can do many things to assist the teacher. Pupils in the sixth, seventh, and eighth grades can conduct first- and second-grade number and English classes, and help with workbooks; and there may be one capable of teaching first- and second-grade Bible, if necessary. If the second-grade children read to the teacher once a day, they can read to a pupil-assistant once. My student-teachers conduct their classes quietly in a chosen corner of the room where I can see and hear them and care for any discipline problem that may arise. However, I do not ordinarily appear to see or hear them; and if I have suggestions, I make them privately to the young teacher. I have been astonished at the original ideas some of these young assistants work out in their teaching. Though no reward is offered for this work, I never lack for volunteers. The spirit of service for the love of serving is easily instilled in young hearts.

About two weeks before school is to begin I receive a large envelope from the conference office, which contains several important items. I am first interested to know when school opens, and when and where the teachers' institute will be held. I am thrilled to see a few new textbooks on the list to replace some I have felt were out of date. I may spend considerable time just enjoying the book list; then it is well in mind as I prepare for school. I may refer to it often as I plan for fifth-grade history or eighth-grade civics. More and more these lists are a marvel to me—someone must spend months making them so complete!

Then comes the week before school—I believe we might well call it big week. Too much cannot be said about its importance; it may decide whether the school year will be a success or a failure. Of course, all teachers order books, look

over school equipment, and make sure that the schoolroom is in readiness; and they get settled in their own living quarters. But is enough visiting done? Every family of the church should be visited if there are children of school age, and many also who are just friends of the school. There are usually a few non-Adventist families who desire to place their children in the church school. Personally, I do not solicit such pupils, but I hesitate to turn one away if his habits are good. Souls may be won if we can and will accept children from good families not of our church.

There is usually someone who can go with the teacher to visit homes; often the pastor is able and willing to do so. If the teacher is returning to a well-known school, book lists may be mailed, with an accompanying personal note, to a few families whose children plan to attend church school. But with most families we need a friendly face-to-face talk. Recently a friend was discussing with me the discouragingly small attendance at their church school. When I inquired why there were so few, she said, "The homes were not visited before school opened." There is something about the teacher's interest in the family, shown by visiting, that makes people want their children in the church school. Some may have problems about which they will appreciate knowing that our prayers are joined with theirs. Some may actually not understand that the church school is for them until personally invited to send their children. I once noticed a widow with three charming children in the congregation of the church whose school I was to teach. Upon inquiry I learned that though she was a member of the church, her children had never attended the church school. When I urged her to send them, she was delighted and so were the children. She had never before been invited to send them.

At last all my pupils are registered, the books are ordered, and the schoolroom and all its equipment are in readiness. School begins, and the new program is to be tried out. Like any good plan, it will develop gradually, beginning when I learn where I am to teach. If I am returning to the same school, I have a fair idea of what pupils and grades I shall have, though there are always some surprises. If I am going to a new school, a letter of inquiry to the pastor or another church school officer will bring some information on which to build.

Discipline problems rarely interrupt the well-planned and consistently followed program. Parents rightly expect that their children will have all their classes as scheduled. Whatever the program needs to be to serve all the pupils, it should be in daily use and posted where children as well as visitors can see it. Children should be instructed to study the daily program so that they will know which class comes next and what to do to prepare for it. Once they know what we expect of them, it is our duty to *expect* it. When children understand that no one is excused until his work is done, the work will be done. We shall not often have to stay after school, because children do not like it any more than we do. Of course, we must not make unreasonable assignments.

Days will come when we vary the program. If we have opportunity to hike into the country some bright day, we go. When the nurse checks our school we give her whatever time she needs. When the educational superintendent comes we have time to hear from him. Once a month we can spare an hour for games and simple refreshments to celebrate the birthdays of the month. At such times we leave out a few classes—different ones each time.

The arrangement of subjects in the daily schedule is a matter of personal choice, though I think all agree that Bible should be the first subject taught to individual classes each day. Today I

Please turn to page 26

Progress on New Denominational Textbooks

New Secondary Textbooks

L. R. Rasmussen
ASSOCIATE SECRETARY,
GENERAL CONFERENCE DEPARTMENT OF EDUCATION

FOR a number of years there has been a growing demand in our schools for more of our own denominational textbooks. To meet this need, the Department of Education has set up a long-range program of preparation and publication.

The first two textbooks in the secondary field have recently been published, for the ninth- and tenth-grade Bible classes. The new book for New Testament history, entitled *The Development of the Christian Church,* and the new book on Old Testament history, entitled *Life and Times of the Old Testament,* have been very favorably received and much appreciated by our Bible teachers.

The next book in the Bible field on which the department is working is a new textbook on denominational Bible doctrines. After this it is planned that the next books to be worked on and revised are *Lessons in Denominational History* and *Youth Problems.* When these are all completed we shall have new Bible books for all the grades in the academy.

In the field of science Dr. Ernest Booth, of Walla Walla College, has been working with the Department of Education in preparing the manuscript for a new textbook in biology. The first draft of this book is completed and is at the present time being read by a committee of our science teachers for their constructive criticisms and suggestions. It is our hope that this book may be ready for use in our academies at the beginning of the 1950-51 school year.

Another great need to which some study has been given is for a suitable course and textbook in health and physiology for the academy grades, but no definite commitments have been made.

New Elementary Bible Textbooks

G. M. Mathews
ASSOCIATE SECRETARY,
GENERAL CONFERENCE DEPARTMENT OF EDUCATION

THE *Bible Lessons* textbooks and workbooks have served this denomination most admirably for many years. The publication in 1945 of the *Listen and Do* pupil's workbooks greatly enhanced the effectiveness of the Bible teaching in grades one and two. For some time, however, our educational leaders and elementary teachers have felt that new Bible textbooks should be provided for our boys and girls in grades three to eight. These teachers recognized the need for a program of Bible instruction which would meet these objectives:

1. The primary goal of each lesson should be the inculcation of desirable character traits rather than the factual content.

2. The program should contain more child appeal. This requires that the physical characteristics of the books (covers, illustrations, format, paper, etc.) should be as attractive, interesting, and satisfying as the stories.

3. The vocabulary and content difficulty should be controlled at the lower grade level of the two grades uniting on the alternating plan.

4. Materials and methods of teaching should incorporate the best present-day practices, providing for the integration of such activities as art, music, literature, reading, and geography; and such study skills as thought questions, outlin-

ing, using the Bible, Bible dictionary, and maps.

About five years ago J. E. Weaver and the General Conference Department of Education organized a program and time schedule for providing new Bible textbooks for our elementary schools. This plan called for the textbooks, teacher's guides, and pupil's companion books to be prepared by well-trained, experienced classroom teachers.

A committee drawn from several sections of the United States was set up under the direction of Miss Mabel Cassell, to prepare the materials for grades three and four. Another committee, directed by Miss Alice Neilsen, set to work on the materials for grades five and six. These two committees have worked faithfully and efficiently for several summers, and are now completing their work on their respective manuscripts. At the beginning of the summer of 1949 a third committee was set up under the direction of Miss Ethel Johnson, to prepare materials for the seventh and eighth grades. It will be some time, however, before these materials are ready.

It is our plan to print this year the textbooks, teacher's guides, and pupil's companion books for grades three and four, odd year, to be ready for use in our schools during the 1950-51 school year. The materials for grades three and four, even year, and for grades five and six, even year, should be ready for use during the 1951-52 school year; and for grades five and six, odd year, for the 1952-53 school year.

We deeply appreciate the excellent work these committees are doing. They are making a large contribution to the educational work of this denomination. We also wish to thank the many teachers who have used these "try-out" lessons and have sent in constructive criticisms and suggestions. And we shall long remember with gratitude the stenographers in local, union, and General Conference who helped in this work.

What High School Students Think About Teacher-made Examinations

(*Continued from page 18*)

selves in comparison with other members of the class.

Students in general consider any particular order of materials in examinations to be of little consequence although they show a decided preference for questions that stress problem-solving ability. Those who are unprepared for a test show a preference for multiple-choice and true-false items. When they are well-prepared, their preference is for the essay and completion items. "Cramming" is considered worthwhile by a majority for essay, completion, and problem types of tests although many consider "cramming" worthwhile for all types of tests.

A majority of students prefer difficult tests with ample advance notice (2 to 3 days) to easier tests without previous notification. They also wish to know *what* a test will cover and the *kind* of items that will be used. Almost all students desire that the papers be returned promptly with grades and corrections on them. Most students welcome tests as often as once a week. Almost all students worry more or less about all examinations. A few worry to such an extent that they are unable to do their best work on a test.

It is evident that most students work for grades and that they desire to have all of their papers scored and to have all of them count as credit toward their final grade. The returns indicate that a majority have an outlook on tests that is sufficiently well balanced and wholesome to serve as a suitable basis for the functioning of psychological principles required for the effective use of tests as learning instruments.—*Journal of Educational Research*, vol. 43, no. 1 (September, 1949), pp. 58-65. (Used by permission.)

SCHOOL NEWS

INSTEAD OF THE USUAL EXCHANGING OF GIFTS among themselves, the students and faculty of Mount Vernon Academy (Ohio) entertained the orphans of the Knox County Children's Home the evening of December 21, 1949. The students contributed the money to present each child with a "treat" and also a $4 gift in harmony with his wishes previously indicated by letter. Having experienced the true spirit of the Christmas season, the students are sure that they enjoyed the evening even more than did their young guests.

IN THE PHILIPPINE UNION MISSION 210 church school teachers are presenting a Christian education to 6,550 boys and girls in grades one to six; with an added 1,313 students in the eight academies, making a total of nearly 8,000. Of these 106 academy students and 238 church school pupils were baptized last year.

NEWBURY PARK ACADEMY (California) is justly proud of its musical organizations: a 35-piece band, directed by Melvin Hill; a chorus of 72 members and a choir of 32 members, both directed by Wayne Rouse, and a still smaller vocal group, the Crusaders.

ALFRED W. PETERSON, educational secretary of the Australasian Inter-Union Conference, reports good enrollments in all the schools, mentioning specifically 404 at Australasian Missionary College and 316 at Fulton Missionary School, in Fiji.

A CONCRETE IDENTIFICATION SIGN has been placed on the Union College campus, facing 48th Street. The 20-inch letters are supported by a concrete base which forms a seat—all the gift of the alumni association.

SAN DIEGO UNION ACADEMY (California) has a well-equipped home economics department, thanks to the efforts of the youth association in raising $800, to which the Conference added $400.

THE INDONESIAN UNION MISSION reports six church schools in operation this year, a small but heartening beginning in Christian education there.

ENTERPRISE ACADEMY (Kansas) recently organized a chapter of the American Temperance Society, with 100 per cent enrollment of the student body.

INGATHERING FIELD DAY at Southwestern Junior College yielded a total of $2,018.93 raised by students and teachers. An additional $1,045 was raised by singing bands on several Saturday nights.

THE NEW GUINEA HIGHLANDS MISSIONARY SCHOOL, at Omaura, has a staff of three missionary families, with 80 students in training for service and responsibility. Six students were baptized last July.

WALLA WALLA COLLEGE LIBRARY now has a capacity of 80,000 volumes since the installation of two tiers of gray steel book stacks. Sixteen carrels provide facilities in the stacks for students doing special research study.

INTENSE INTEREST IS SHOWN in the Southern California Conference drive, "Social to Save," which is making Lynwood Academy campus an organized, supervised, and centralized recreation center for all Missionary Volunteers in the conference.

THIRTY-FIVE BOYS AND GIRLS in the upper grades of the John Nevins Andrews Elementary School (Takoma Park) joined the baptismal class after the Week of Prayer conducted by Warren Wittenberg, Missionary Volunteer secretary of the Potomac Conference.

CONSTRUCTION HAS BEEN RESUMED on the new administration building at Atlantic Union College. When completed this large modern building of colonial type will provide space for administration offices, classrooms, and library. The last wing to be completed will contain the auditorium.

KOREAN JUNIOR COLLEGE, with James M. Lee as principal, reports an enrollment of 400 in all grades. When this school is fully established in its new quarters now under construction, the Korean Union Training School will be incorporated into it. The latter school had an enrollment of 273 in 1948-49.

CHEMISTRY STUDENTS AT PACIFIC UNION COLLEGE are rejoicing in the spacious accommodations of the new chemistry building, which provides for nearly 200 students in general chemistry, 100 in organic chemistry, and 64 in quantitative chemistry. There is also a lecture hall large enough to accommodate a class of 90, a small study room, six office rooms, and a stockroom that has twice the capacity of the old one.

SEVEN STUDENT EVANGELISTIC EFFORTS are being conducted this year by religion majors of Washington Missionary College, under supervision of M. G. Conger, assistant professor of homiletics. Five other students in evangelism are assisting in the effort being conducted by R. L. Boothby in downtown Washington, D.C.

BRAKEWORTH JUNIOR ACADEMY (Birmingham, Alabama) was formally dedicated on New Year's Day. A beautiful new brick building, it provides four large classrooms, library, principal's office, and ample sanitary facilities. A large gymnasium and recreation room will be added a little later.

LOVELAND BROOM COMPANY (Campion Academy, in Colorado) recently received its largest single order, for more than 5,000 dozen brooms. Two hundred bales of broom corn have been purchased to fill this order from a large chain store.

VIRGINIA-GENE SHANKEL, instructor in violin and piano at Atlantic Union College, was chosen as national winner in violin by the panel of judges present at the National Winners' Concert in Carnegie Hall, November 5.

MORE THAN THIRTY STUDENTS OF HELDERBERG COLLEGE (South Africa) entered the colporteur work during the summer vacation, November through January, hoping to earn scholarships for the 1950 school year.

CHRISTOPHER HEIL, Union College secretarial student, was recently awarded the coveted Gregg Diamond Medal for writing 200 words a minute in shorthand.

MRS. VIVIAN JOHNSON, for six years laundry suprintendent at Union College, is the new dean of girls at Highland Academy, in Tennessee.

A $2,379 OFFERING FOR WEEK OF SACRIFICE was given by students and faculty of Pacific Union College.

A MASTER COMRADE CLUB of 33 members has been organized at South Lancaster Academy (Massachusetts), sponsored by C. Roy Smith.

MADISON COLLEGE was host, November 3-6, to 150 representatives of self-supporting missionary enterprises now operating in the Southland.

FOUR STUDENTS OF CEDAR LAKE ACADEMY (Michigan) expressed their desire for baptism at the close of the Week of Prayer conducted by D. S. Wallack.

NINETEEN CONVERTED JAPANESE PRISONERS OF WAR were baptized by Philippine Union College President A. N. Nelson on Sabbath, October 29, by special permission of prison authorities.

STUDENT COLPORTEURS from West Indian Training College and Kingsway High School, in Jamaica, delivered £1299-12-3 worth of books during last summer vacation. Eleven students earned whole or partial scholarships.

THE WEEK OF PRAYER at Lynwood Academy (California), conducted by E. B. Heppenstall, was most successful. A number of students are awaiting baptism, and this interest will be developed by the Bible department of the academy.

WITH 230 PUPILS ENROLLED in the Washington Missionary College elementary demonstration school, two teachers have been added; rearrangements were made to provide two additional classrooms, with the necessary tables, chairs, and desks; and the first grade is taught in two shifts, one group in the morning, the other in the afternoon.

THE CELEBES TRAINING SCHOOL opened last year, offering only Class I of the middle school course. This year Class II has been added, and the enrollment in the two classes is about 100. Each year one more class will be added until the four classes, corresponding to our grades seven to ten, are given. L. R. Winkler is the principal, assisted by Mrs. Winkler and three national families. This is a Malayan school.

THE COLUMBIA UNION CONFERENCE is happy over the erection during 1949 of several new school buildings: Mount Aetna Academy, Maryland; Harrisburg Intermediate School, and elementary schools at Tunkhannock and Lowville, Pennsylvania; and Wytheville Intermediate School, Virginia. Three others are under construction —at Reading, Pennsylvania; Vienna, Virginia; and Springfield, Ohio.

INDIANA ACADEMY reports new staff members: Ollie Green, maintenance; Mrs. Evelyn Hansen, matron; A. M. Houck, farm superintendent; William Stitt, accountant and business manager; Garth Thompson, dean of boys, teacher of New Testament history and English I, and conductor of the band, chorus, and glee club.

INDONESIA UNION SEMINARY reports a capacity enrollment of 110 students in academy, ministerial, and teacher-training courses. A. M. Bartlett is the director of the school, ably assisted by eight full-time teachers and two student teachers.

PACIFIC UNION COLLEGE BINDERY, with J. C. Sherman as superintendent, is rebinding books for more than 50 libraries and 400 schools of California, Nevada, Arizona, and Hawaii. Eight students are employed in the bindery.

COLUMBUS DAY, OCTOBER 12, saw 100 Atlantic Union College students in two groups visiting literary and historical points of interest in New England, cradle of American civilization.

PACIFIC UNION COLLEGE STUDENTS recently contributed $143 to the library of the Mexican Agricultural and Industrial School at Montemorelos.

LYNWOOD ACADEMY (California) lists two new staff members this year: Lois Fouts, commercial; Lilah Nahorney, cashier and accountant.

CENTRAL AMERICAN VOCATIONAL COLLEGE (Costa Rica) has enrolled more than 130 students for the 1949 school year—a 60 per cent increase over 1948.

ENTERPRISE ACADEMY (Kansas) students and teachers raised $1,024.29 Ingathering funds on their annual field day.

STANBOROUGHS SECONDARY SCHOOL (England) has a capacity enrollment this year of just over 300, with many on the waiting list.

TWELVE STUDENTS OF PACIFIC UNION COLLEGE will be listed in the 1949-50 edition of *Who's Who Among Students in American Universities and Colleges.*

WALLA WALLA COLLEGE STUDENTS who remained on the campus during Thanksgiving week end prepared and distributed 24 baskets of food to needy families in the vicinity.

THE SEVENTY-FIFTH ANNIVERSARY of the founding of Emmanuel Missionary College was celebrated in connection with the commencement exercises, the week end of May 28, 1949.

THE ALTA VISTA CHURCH SCHOOL (California) has been really transformed, with paint inside and out, new cupboards in each classroom, new drinking fountains, a large cement porch at the rear, and a backstop for the playground.

MEXICAN AGRICULTURAL AND INDUSTRIAL SCHOOL (Montemorelos) graduated 13 young men and seven young women at the end of the 1949 school year, and the enrollment this year is the largest ever—with five or more boys in each dormitory room.

FIVE STUDENTS OF LA SIERRA COLLEGE are, on their own initiative, conducting evangelistic meetings in Bloomington, twenty miles from the college. Meetings are held Friday and Sunday evenings, and the average attendance has been 40 to 50 persons. Forty have enrolled for the Twentieth Century Bible Course.

THE JAPAN JUNIOR COLLEGE has grown from an enrollment of 30 in 1947 to 152 in 1949, 90 per cent of whom are baptized church members definitely preparing for service in the cause of God. W. W. Konzack is president of the school, assisted by 22 full-time and eight part-time teachers. Last school year ministerial students conducted a series of 16 evangelistic meetings in a near-by town, which resulted in the baptism of 14 and organization of a church of 22 members.

THE MINISTERIAL SEMINAR of Mount Ellis Academy (Montana), led by S. H. Emery, redecorated the Livingston church interior in late November, preparatory to holding a series of evangelistic meetings. At the first meeting, December 4, 50 extra chairs had to be brought in to seat the overflow attendance. The seminar students and Elder Emery are also broadcasting over the Livingston radio station on Sunday afternoons.

THE PRESCHOOL WORK AT MADISON COLLEGE is now supervised by Mrs. Gilbert Johnson, R.N., and Mrs. James Schuler, a graduate dietitian. Elder and Mrs. A. W. Spalding, who began the work and carried it forward for several years, have retired and are now making their home at Collegedale, Tennessee.

A COMPLETE LIBRARY OF ORGAN MUSIC has been presented to Pacific Union College Library by Mrs. Bessie Beatty Roland, of Oakland. This library of music has been personally gathered by Mrs. Roland over many years and from many countries of the world during her travels.

PHILIPPINE UNION COLLEGE facilities are taxed to the limit to accommodate the 338 college students enrolled. Of the 56 members of the 1949 graduating class, 29 have already entered denominational work; others are continuing their education.

ROGUE RIVER ACADEMY (Oregon) reports additions to the library, new paint and installation of hot water in rest rooms, and the organization of a robed junior choir in the seventh- and eighth-grade room, as its most recent points of progress.

EIGHT SENIORS AND TWO JUNIORS of Walla Walla College have been chosen for listing in the 1949-50 edition of *Who's Who Among Students in American Universities and Colleges.*

ON NOVEMBER 7, 126 students and teachers of Canadian Union College volunteered as blood donors when the Canadian Red Cross Clinic visited the college.

SEVEN STUDENTS OF LODI ACADEMY (California) were baptized December 3 after the Week of Prayer conducted by W. L. Hyatt.

The Organization and Program of a One-Teacher Church School

(*Continued from page 20*)

may need extra time for first- and second-grade Bible. Tomorrow they may use workbooks under student supervision while I spend extra time on fifth- and sixth-grade Bible. Instead of a long list of specific classes with a fixed time for each, my program follows the block plan; as, Bible: 9:30-10:20; arithmetic: 11:00-11:45; and so forth. Small children should be dismissed early if possible, so their classes are finished first.

A good program, conscientiously followed, with enough spice to make it tasty, should assure success to every school. Much of our work can be finished in thirty weeks, to give more time in the spring for reviewing and relaxing. The best advertisement for any school is a successful year. May every one of our church schools be thus advertised next June.

MALAYAN UNION SEMINARY (Singapore) has a record enrollment this year of 566 students, of whom 94 are dormitory residents. Thirteen were baptized in 1948, and seven were baptized in the first half of the 1949 session. There are 2,005 students enrolled in all grades in the schools of the five missions making up the Malayan Union Mission.

SHENANDOAH VALLEY ACADEMY (Virginia) reports a very prosperous year for its 350-acre farm. All four silos were filled to capacity, and 4,000 bushels of corn, 1,000 bushels of wheat, and 100 tons of hay were sold. The 58 Guernsey cows provide the school family with milk and other dairy products, and the surplus is sold.

WALLA WALLA COLLEGE BIOLOGY CLUB has built a 30′-x-50′ frame lodge and also a 14′-x-18′ laboratory on a six-acre tract of land in the near-by Blue Mountains. The building materials and furnishings were largely donated by interested lumber and furniture companies.

A NEW SECONDARY SCHOOL was opened in North Sumatra last August, with an enrollment of 31 boys and 12 girls, all but five of whom are children of our church members. M. Siregar is in charge of the new school.

"CHRISTMAS SPIRITUAL," a composition by Perry Beach, of the Emmanuel Missionary College music department, was one of the numbers presented in the Christmas program by the choral organizations of the college.

THE SOUTHWESTERN JUNIOR COLLEGE chapter of the American Temperance Society was reorganized in November, and officers were elected for the current school year.

PHILIPPINE UNION COLLEGE EXTENSION DIVISION, at the Mindanao Mission Academy, has enrolled 60 students in elementary teacher training and Bible instructor courses.

A BAPTISMAL CLASS of 14 was formed at San Pasqual Academy (California) after the autumn Week of Prayer conducted by Robert Olson.

BAPTISM OF ELEVEN STUDENTS climaxed the Week of Prayer at Caribbean Training College last autumn.

OVER $1,000 WAS GIVEN by students and teachers of Union College in the annual Week of Sacrifice Offering last November.

NINE STUDENTS OF WASHINGTON MISSIONARY COLLEGE have been nominated for listing in the 1949-50 *Who's Who Among Students in American Universities and Colleges.*

CLINTON W. LEE, assistant dean and Bible instructor at Emmanuel Missionary College, received his M.A. degree in education from the University of Michigan at the close of the 1949 summer session.

CARL D. CHRISTENSEN, associate professor of religion at Walla Walla College, has resigned that post to accept the presidency of the Panama Conference, with headquarters at Cristobal, Canal Zone.

ENTERPRISE ACADEMY (Kansas) has recently secured quite complete printing equipment from an elderly newspaper publisher who was retiring. Edward Coffman is in charge of the developing printing industry at the academy.

THE SPANISH-AMERICAN SEMINARY (New Mexico) has added a new industry. The broom shop, with Manager Wood, Chief Broommaker Cesar Vega, and eight student helpers, is humming with activity, filling orders for toy brooms, whisk brooms—all kinds of brooms.

TWO HUNDRED TEACHERS and educational workers of the Central and Northern California and Nevada-Utah conferences met in regional institute at Asilomar-by-the-Sea, October 23-26. G. M. Mathews, G. E. Vandeman, and Miss Louise Kleuser were present from the General Conference.

EMMANUEL MISSIONARY COLLEGE ELEMENTARY SCHOOL has added one full-time teacher—Mrs. Albert Watson, teaching second grade; and one part-time teacher—Marguerite Ross, senior four-year elementary education student, assisting with seventh grade. The enrollment in the elementary school is 172.

A TEAM OF SEMINARY TEACHERS, F. H. Yost, L. E. Froom, and R. A. Anderson, are at present conducting an extension school of the Seventh-day Adventist Theological Seminary, at Montevideo, Uruguay, for workers in the South American Division Conference. Similar schools are planned for Central Europe later this year, and for Australasia in 1951.

HELDERBERG COLLEGE (South Africa) graduated a class of 19 at the close of the 1949 school year, October 29. Eighteen of these received appointments to positions of service in the various union conferences making up the Southern African Division. The one remaining graduate has entered the colporteur ministry.

NEWBURY PARK ACADEMY (California) is perhaps unique among our schools in that its farmland is largely devoted to producing seed for Burpee Seed Company. The past season's seed crop included two acres of marigolds, two acres of zinnias, four acres of peppers, and 14 acres of carrots.

A 50-GALLON AQUARIUM has been installed by the biology department in the first-floor hall of the science building at Washington Missionary College. This will serve to acquaint students with aquatic life in near-by ponds and streams.

CARIBBEAN TRAINING COLLEGE (Trinidad) graduated its first junior college class of two, on December 4. The academy senior class of 40 members received diplomas at the same time.

LEOLA CASTLE is the new Spanish and home economics teacher and librarian at Campion Academy (Colorado). William VanOrnam teaches piano and organ.

W. A. NELSON, educational secretary of the Lake Union Conference, reports a gain of 178 in enrollment in schools of all grades in that union.

MAPLEWOOD ACADEMY (Minnesota) was host to the conference workers' meeting last November 22 and 23.

FORTY-ONE PERSONS WERE BAPTIZED and added to the Union College church on Sabbath, December 10.

Undergraduate Missionaries

(*Continued from page 11*)

came when everyone joined in singing, at sunset, "The End of a Perfect Day."

Of course, this is a pioneering group. Next year the course will probably take the students even farther into the jungle. It would seem fitting that some of our other colleges should sponsor similar projects for prospective missionaries of other categories, such as ministers and teachers. The colleges on the West Coast, for instance, could avail themselves of Mexico as a field unit; and those on the East Coast would find Cuba a convenient location for a little experimental mission station.

Though the School of Tropical and Preventive Medicine is probably the youngest educational entity in the denomination, and has as primary aims a humanitarian-scientific purpose, it has given denominational educators a new slant on the education of prospective missionaries.

LAURELWOOD ACADEMY (Oregon) reports $1,131 raised on the annual Ingathering field day in December.

ENGLISH I AND II STUDENTS OF TAKOMA ACADEMY raised nearly $30 with which to purchase food, clothing, toys, and other gifts, which were sent in a Christmas box to a family in Germany.

IN THE PAPUAN MISSION (Pacific Ocean) 44 teachers are working in more than 40 village schools; there are five district schools supervised by European missionaries, two intermediate schools, and a main training center for workers.

THE TEACHERS OF TOMORROW CHAPTER of Walla Walla College is sponsoring Saturday night programs to raise money for the purchase of equipment needed by some of the small church schools of the North Pacific Union. Most of the 103 students enrolled in the elementary teacher training curriculum at the college are regular members of the Teachers of Tomorrow chapter.

LYNWOOD ACADEMY reports an enrollment of 249.

THE RICHLAND CENTER CHURCH SCHOOL (Michigan) cleared $175 from corn raised on acreage donated by a farm neighbor.

THE BIENNIAL FATHER-SON BANQUET at La Sierra College, November 20, drew 155 fathers, and as many sons, into fellowship and feasting together. H. M. S. Richards was the guest speaker for the occasion.

NEW STAFF MEMBERS AT TAKOMA ACADEMY (Maryland) this year include F. A. Meier, Bible and history; M. Bruce Bush, chemistry; C. B. Cowles, band director and teacher of wood wind instruments; Mrs. Eldine Frederick, commercial; Rhea Jean Beckwith, Spanish and home economics.

The Four Ages of Religious Experience

(*Continued from page 3*)

ing perception; the stories, which up to now have been interesting, become illuminating. The faith of his fathers is no longer bound up in words to be recited; the vision which they saw he now begins to appreciate.

The final step is the appeal to reason, the synthesis between religious experience and other experience, the interpretation of a creed in terms of the problems and needs of personal and social everyday living. When the young adolescent begins to ask questions about his religion and its application to life situations, he should be given all the encouragement and all the information possible. There must be opportunity for the fullest examination of truth that the growing individual is willing and able to make. This complex of ritual and story and belief and reasoned application is long and involved; but it is the only method of teaching religion that ever, so far as we have record in the history of mankind, has been effective.—Acknowledgments are made to Bernard Iddings Bell, from whose *Crisis in Education* the foregoing is an adaptation.

The Working Policy

(*Continued from page 6*)

d. Procedures.
e. Board committees, their duties.
9. THE FACULTY.
a. Personnel.
b. Responsibilities and functions.
c. Meetings.
d. Committees.
10. OFFICERS OF ADMINISTRATION.
a. President, his duties and functions.
b. Dean, (other officers).
11. OFFICERS OF INSTRUCTION.
a. Divisional chairmen.
b. Department heads.
c. Academy principal.
d. Elementary school principal.
12. SUPERINTENDENTS OF AUXILIARY SERVICES.
a. Food service director.
b. Director of health.
c. Maintenance superintendent.
d. Student testing and counseling service.
e. Placement bureau.
f. Library.
13. THE INDUSTRIAL PROGRAM.
a. Objectives of campus industries.
b. Relation of industries to instruction.
c. Duties and responsibilities of superintendents.
14. THE EXTRACURRICULAR PROGRAM.
15. INDEX OF GENERAL INFORMATION.
a. Academic processions.
b. Alumni association.
c. Attendance policy.
d. Book policies.
e. Bulletin.
f. Chaperonage.
g. College store.
h. Deans' list.
i. Duplicating service.
j. Examinations.
k. Faculty load.
l. Grading system.
m. Office supplies.
n. Professional organizations.
o. Salaries.
p. Secretarial service.
q. Sponsors.
r. Summer sessions.
s. Syllabuses.
t. Telephone service.
u. Term papers.
v. Travel regulations.
16. INDEX.

REFERENCES

In the preparation of this article the following materials were consulted:

1. Department of Higher Education, N.E.A. *Current Problems in Higher Education*. Washington, D.C. Issues of 1947, 1948.
2. Charters, W. W., ed. *The Educational Policies of Stephens College*. Columbia, Missouri: 1945.
3. The Clemson Agricultural College. *Faculty Handbook of Information*. Clemson, South Carolina: 1948.
4. Keezer, Dexter M. *The Light That Flickers*. New York: Harper and Brothers, 1947.
5. Kinder, James S. *The Internal Administration of the Liberal Arts College*. Morningside, New York: Teachers College, Columbia University, 1934.
6. Reeves, Floyd W., *et al. The Liberal Arts College*. Chicago, Illinois: University of Chicago Press, 1932.
7. Russell, John D., ed. *Problems of Faculty Personnel*. Proceedings of the Institute for Administrative Officers of Higher Institutions. Vol. 18, Chicago, Illinois: University of Chicago Press, 1946.
8. Various college bulletins.
9. Working policies of Seventh-day Adventist colleges.

How to Make Arithmetic More Meaningful

(*Continued from page 10*)

four inches on the tape measure, double it to get the diameter, and then multiply by 3 1/7 to get the circumference. To prove they can find the circumference of a circle by the tape-measure method, let them find the circumference of some plate by figuring, then lay the tape measure on the table and roll the plate along it to see whether they can make one complete revolution of the plate along the length they said was the circumference. After the children have seen the accuracy of the method and understand it, then they are ready to work some problems without the use of the tape measure. The least important step in the process is using the formula, unless the children understand it; yet teachers tend to make the use of the formula the first step in teaching the process.

In all grades children can usually do many problems mentally before they can do the same problems when they see them in print. In the printed form the children are often baffled by the symbols used. A child can answer this question which he hears orally, "How much are one third and one third?" before he can solve this problem in written form: $\frac{1}{3} + \frac{1}{3} =$. He needs to do this type of mental work with verbal problems while he is gaining insight and understanding, before he is asked to work with symbols. This is true not only of fractions but of the introductory steps in many phases of arithmetic. Our children need more mental arithmetic as part of their training in its meaning.

They also need to learn to estimate answers before solving their problems, and then check their answers for reasonableness. Many first-graders will say, "400 and 400 are 800." Do eighth-graders see that a reasonable answer to

$$\begin{array}{r} 398 \\ +426 \end{array}$$

is about 800, because the numbers are both approximately 400? Many first-graders say, "Half of eight is four." Do eighth-graders realize that $\frac{1}{2}$ of $8\frac{3}{4}$ will have to be a little more than four, because $8\frac{3}{4}$ is a little more than 8? or does the mixed number make the problem seem new? First-graders say, "Two and two are four." Do eighth-graders quickly see that

$$\begin{array}{r} 2\frac{1}{2} \\ +2\frac{3}{4} \end{array}$$

will be a little more than five because two and two are four and the two fractions make more than one additional?

To make arithmetic more meaningful, the teacher will use many concrete experiences to help the children learn the meaning of numbers and processes; he will make use of the children's ability to solve lifelike problems mentally before requiring them to use symbols which they do not understand; and he will train children to determine what would be a reasonable answer before they actually solve the problem. This type of training will help children to gain insights and to see short cuts in the processes, as well as increase their accuracy in solving the problems.

SOUTHWESTERN JUNIOR COLLEGE was host on November 4 and 5 to the publishing department secretaries of the Southwestern Union. The purpose of the visit was to award scholarships to a number of students who canvassed last summer, and to organize a student colporteur band.

The JOURNAL of TRUE

Education

Printed by
Review and Herald Publishing Association
Takoma Park, Washington 12, D.C.

Keld J. Reynolds, *Editor*

Associates

Erwin E. Cossentine George M. Mathews
Lowell R. Rasmussen Arabella Moore Williams

THE JOURNAL OF TRUE EDUCATION is published bimonthly, October through June, by the Department of Education, General Conference of Seventh-day Adventists, Takoma Park, Washington 12, D.C. The subscription price is $1.25 a year.

Correspondence concerning subscriptions and advertising should be sent to the Review and Herald Publishing Association. Address all editorial communications to the Editor.

You Should Read

Crisis in Education: A Challenge to American Complacency, by Bernard Iddings Bell. New York, Whittlesey House (McGraw-Hill Book Company, Inc.), 227 pp., $3.

This is a most thought-provoking and searching criticism of American education. Dr. Bell recalls with alarm the cultural childishness in America, the substitution of purchased amusement for recreation, the decay in good manners, and the lack of parental responsibility. He examines the American grammar school, the high school, the college, and finally the home, and shows how all are failing to train students to become adults.

The grade school today, states Dr. Bell, places too much emphasis on the fatuous notion that children are at their best and happiest when encouraged to do as they please. Also, too little emphasis is placed on the discipline of word, number, and form.

Dr. Bell points out that American high schools tolerate slipshod work. They play around with muddled thinking and careless craftsmanship. They send youth to higher education who are grossly unfitted for it. They train neither head nor hand effectively. Such a criticism has worth. American youngsters today should be helped to think and act, not to be entertained.

It is interesting to note that Dr. Bell would have religion an integral part of the college curriculum. He states that a threefold course of study—the liberal arts plus humanistic studies plus religion—should characterize collegiate education. He believes that "religion, in short, is the art of living day by day with God."

One hindrance to education is the overloading of the schools by placing on teachers' shoulders responsibilities that should be assumed by the home. Parents should teach three things which the child must master if society is to function soundly; namely, good manners, morals, and religion.

The author's sincerity, his alarm, his wide experience as a teacher and lecturer, make this a book that should be read by everyone interested in the problem of education as it is today. It is of special interest to us as a denomination since so many of Dr. Bell's observations and ideas coincide with the principles by which we have sought to direct our educational work.—CONARD N. REES, PH.D.

Happiness for Husbands and Wives, by Harold Shryock, M.D. Takoma Park, Washington 12, D.C.: Review and Herald Publishing Association, 1949, 256 pp., $2.50.

Statistics show that in the last nine years there has been an increase of about eight million households in the United States. At no other time in the history of this country has there been such an increase. Statistics also show that millions of these households are unhappy and will disintegrate. We blithely say, "That's the way of the world." But even in our ranks, homes are not as united as they should be.

Here is the book we have been waiting for, to guide our young people as they plan for marriage and the building of a happy home. Here are such marvelous chapters as "Merger of Personalities," "Maturity of Personality," "Mastering Our Moods," and "To Have and to Hold." So beautifully, almost sacredly, God's plan for His children is lovingly portrayed in the chapter "Mysteries of Life."

This book is not merely a summing up of beautiful theories, but a practical guide, rich in illustrations and case histories which enable one to follow the thinking processes and the resultant actions.

What to do with a husband who becomes enraged when he cannot have his own way, and the explanation of his behavior, is clearly set forth in the practical chapter "Harnessing the Temper."

Happiness for Husbands and Wives is a must for every young couple, engaged or married, for it does point the way to happiness. Even those no longer young will find that last chapter, "Living Happily Ever After," packed full of timely suggestions.

Happiness for Husbands and Wives is one of the ten books chosen by the Department of Education for parents to read during the year 1950. May the readers be able to say with the author, "Ours has been a consistently happy home."—ARABELLA MOORE WILLIAMS, M.A.

Entering-Wedge Premium Offer

Dollar-Day and Double-Dollar-Day Special

BE THRIFTY IN '50

The 1950 CHRISTIAN HOME CALENDAR

- Twelve four-color prints
- Gives true weekly cycle
- Shows seventh-day Sabbath in red
- Features sunset tables
- Includes a helpful daily Scripture
- Silently proclaims the message

★ LIFE and HEALTH DOLLAR-DAY SPECIAL OFFER

Six Months, With Calendar ..... *Only $1.00*

Use the entering wedge in your missionary efforts. Give several six-month trial subscriptions, each with our beautiful premium calendar. LIFE AND HEALTH, the National Health Journal, makes and keeps friends.

★ LIFE and HEALTH DOUBLE-DOLLAR-DAY SPECIAL

Fourteen Months, With Calendar ..... Only $2.00

★ YOUTH'S INSTRUCTOR DOLLAR-DAY SPECIAL OFFER

Three Months, With Calendar ..... *Only $1.00*

A dollar will bring you or your friends 13 issues, including three color numbers, of the YOUTH'S INSTRUCTOR, and calendar. Reach your friends with the message this easy and appealing way. Remember, both the INSTRUCTOR and premium give weekly testimony to the truth.

★ YOUTH'S INSTRUCTOR DOUBLE-DOLLAR-DAY SPECIAL

Seven Months, With 7 Color Numbers, 23 Reg. Issues, and Calendar, $2.00

To the _____ Book and Bible House
Please enter subscriptions as checked below.

Find enclosed $_____ for—

- ☐ Life and Health, 6 mos., with Christian Home Calendar, $1.00
- ☐ Life and Health, 14 mos., with Christian Home Calendar, $2.00
- ☐ Youth's Instructor, 3 mos., with Calendar $1.00
- ☐ Youth's Instructor, 7 mos., with Calendar $2.00

Name _____
(please print)

Address _____

(This offer good only within the continental limits of the United States.)

This Offer Expires February 28

These offers apply to new or renewal subscriptions, and the calendars may be sent to separate addresses. If you are already a subscriber to LIFE AND HEALTH and the YOUTH'S INSTRUCTOR and they are not part of the BIG THREE or FAMILY GROUP, extensions may be made. You may also wish to have subscriptions sent as gifts to friends or relatives. When requested, we will mail a beautiful gift card FREE. Names for additional subscriptions and Christian Home Calendars may be written on a separate sheet.

If the premiums are to be sent to separate addresses, please give accurate mailing instructions so there will be no confusion in caring for your order.

ORDER *NOW* FROM YOUR BOOK AND BIBLE HOUSE