

# christian educators journal

*The Making of a School—See Page 25*

## SPECIAL ISSUE

### **Alternatives to Traditional Education**

September, 1973



# christian educators journal

SEPTEMBER 1973

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# Editorial

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A Christian teacher, cognizant of his human nature and its fallible character, is self-critical, constantly engaged in re-evaluating method and technique, in searching for better ways to teach. It is this search that keeps one alive, that dares one to risk something new, to risk failure, to explore and seek. One might try A.S. Neill's Summerhillian philosophy and later find himself more attuned to James Dobson's *Dare to Discipline*, a more traditional, commonsensical approach to learning. Perhaps most Christian teachers are eclectic pragmatists; all, however, are open to new suggestions and ideas toward realizing a more perfect experience.

In the recent past we have heard a lot about TV in the classroom, team teaching, individualized instruction, taking the classroom out into the community, utilizing games in class to make learning fun, student administered curricula, mini courses, etc.

Some of us have tried letting students help determine course content. We have listened to them and have geared our demands to their wishes at times in order to make their learning more palatable, our courses more relevant. We have tried to "meet the student where he is", to treat each child as a unique individual. We have done away with grades, introduced the ungraded primary system, and come to recognize change as a basic fact of

life. Sometimes we have been successful; often we have failed.

As an editorial board of CEJ we decided several months ago to have as our theme for the year's special issue, "Alternatives to Traditional Education." We solicited, through department heads, several announcements in CEJ, and by personal contact, manuscripts from elementary, secondary, and college teachers in Christian institutions. In this issue you will find some of their answers to new approaches in their classrooms. Some of what you read in these pages you will have heard or read before. Some ideas you may have tried and found acceptable or wanting. Hopefully, you will react in some way and send your reactions and responses to us for further publication.

Among the articles printed in this issue are the three prize-winning entries chosen from the manuscripts submitted prior to the contest deadline date: First prize of \$50 to Pat Koning for her article "An Experiment in Individualized Instruction in Music", second prize of \$30 to Kay Hoi-tenga for "An Experiment in Language Arts", and third prize of \$20 to Arnold Terpstra for "Exploring Career Opportunities."

Jud Mereness, Chairman  
Special Issue Committee

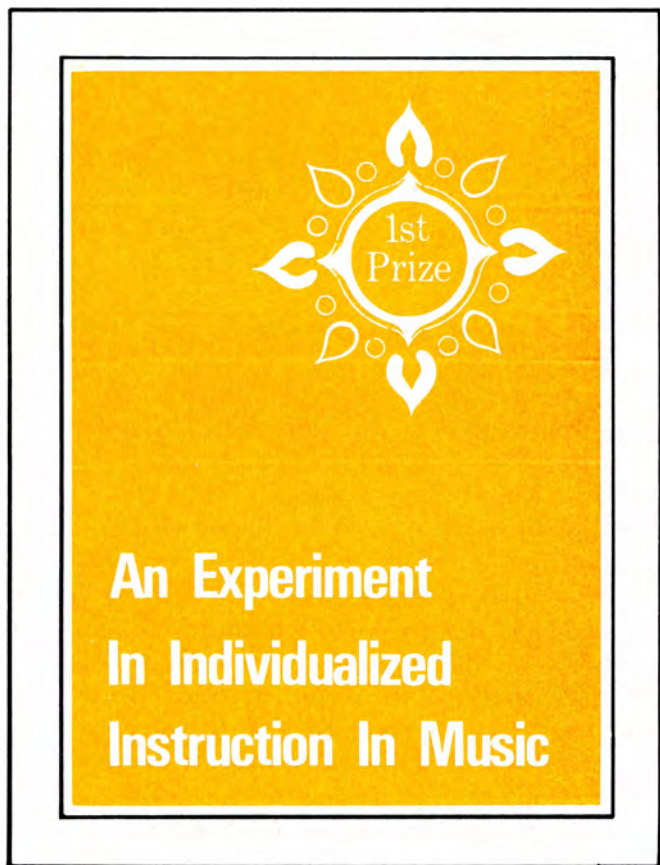
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## Business Manager Retires

Mr. Cornelius Van Beek, already retired from a secondary Christian school principalship, has given much to the *Christian Educators Journal* over the past few years, in both labor and love. On behalf of the CEJ Board of Trustees I would like to thank him most heartily for this.

As he retires from these duties and others stand ready to assume them, we wish Mr. Van Beek God's nearness and strength in the years to come.

Harry Cook, Chairman  
Board of Trustees



by Pat Koning\*

The children in our school have experienced a thorough music education program. Grades 1-6 attend music class two times a week for one-half hour each time. As a result by the time these children are in fifth and sixth grades they have acquired a basic knowledge of many musical qualities. Review of these qualities is necessary. In order to stimulate renewed interest in music class and to provide variety, I decided to try a new approach with my fifth and sixth grade classes.

### **Mechanics of this Approach**

Before introducing the idea of learning centers to the children I organized the music room completely. Each center had a large colorful chart identifying what basically would be done in that particular area. I also included a task sheet which specifically outlined what was expected of the children if they chose to work in that center.

In each center all needed supplies were placed, including paper, construction paper, rulers, paints, erasers, scissors, paste, yardsticks etc., depending

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\*Miss Koning teaches vocal music (K-6) at Sylvan Christian School, Grand Rapids, Michigan.

on the activity. The centers were located in corners of the room and along walls, providing ample work space in each learning center and on the floor in the center of the room. When everything was organized I explained the new approach to the students and the experiment was off to an eager start. The children could hardly wait to choose their learning center and to start their work. Frankly, this was quite an improvement in their attitudes toward music.

After deciding on an area, the student was to sign a contract in which he agreed to complete the work assigned on the task sheet. Upon completion of each task, a student could check off on his contract what he had finished so far. This provided a feeling of accomplishment and also motivation to continue with the next task. When all tasks were completed I held a short conference with the student for mutual evaluation of the completed project.

### **Observations on this Approach**

Surprisingly enough the noise level was not a problem at all. Children were allowed to talk quietly while they worked.

Also, discipline problems were at an all time low because in most cases children were doing something which they had chosen.

If children come to music class for one-half hour a week, I think they should have projects that they could complete in 3 to 4 weeks time. This would be 1½-2 hours work time in all. If the projects last longer than this, students tend to lack motivation and in turn lose interest in their work. For those students who complete their projects before the specified time limit expires, other quiet and constructive activities should be provided.

Since I feel that there is a definite need for class instruction in music, I would suggest that the Learning Center Approach alternate with the classroom approach throughout the school year. A schedule could possibly be worked out as follows: September, November, February, April—learning Centers; and October, December, January, March, May—Classroom instruction.

### **Number of Simultaneous Centers**

I found that more than five or six centers at one time caused too much confusion and indecision on the students' part. Limiting the choices to five makes it easier for the teacher to prepare the room and keep track of everyone's work. Unfortunately, sometimes one area holds appeal for a large group

of children. In that case I had to limit the number of children accepted in that center and if continued interest was shown for it I would offer it again at a later date.

### Advantages and Disadvantages

Children seemed to be happier and enjoyed coming to music class. It was especially enjoyable for children who at this age do not particularly like to sing. Children also seemed to like having their choice in music class.

Because working in learning centers does not allow for group singing in music class nor for group listening lessons I feel that this cannot be the one and only approach. It is only another way to teach music. In my particular situation the students came for an additional thirty minutes each week for choir so we did not neglect singing.

### Student Reactions

1. "I learned that music is fun."
2. "I learned lots of new musical words and what they mean."
3. "I learned about Sousa." (or Francis Scott Key or Beethoven)
4. "I learned how hard it must be to compose music."
5. "It wasn't work at all. I learned how to make a crossword puzzle and it was fun."

### Some Ideas for This Approach

A. *Reader's World*: from a choice of 30-40 books about composers and performers the child chooses one that interests him, reads it, writes a short report, and listens to two compositions by that composer or performances by that performer.

B. *Musical Monsters*: using musical symbols which are listed and explained on a large colorful chart, children make a musical monster or creature. Every part of the creation must be a musical symbol. Children could color, paint, draw, cut and paste construction paper to make these. On the back of the project children list the symbols that they used and define what the symbols mean.

C. *Crossword Cranny*: using musical terms or names of musical instruments (see Figures 1 and 2 for examples) children made crossword puzzles. These puzzles were fun to do later in class. Also, I made a ditto of each puzzle and sent ten copies home with each child who made one so that their family and friends could do their puzzle.

D. *Recorder Review*: All 4th grade children in our school learn how to play the recorder. Some

5th grade students especially want to continue to play. At this center I included a review sheet of the staff, note values, and fingering and then assigned several duets. Children were allowed to choose other songs to practice. Later they performed for their class. A nearby empty classroom was used for this project in order to avoid excess noise in the music room.

E. *Coded Musical Messages*: this center included three game sheets involving experience with the musical staff: Game 1) "Musical Riddles:" e.g. A *g* placed on the musical staff as the clue for "The resting place for a car." *garage*. Game 2) "Word Scramble:" e.g. The notes *a, g, b* being decoded for "A sack" *bag*. Game 3) "Coded Musical Story:" about a boy named *Ed* and his pet *bee*. This story included many words which had to be decoded from notes placed on the musical staff. At the end of each game sheet children were urged to make some of their own riddles, word scrambles and stories using the musical staff.

F. *Listening Center*: students listened to a tape of a musical composition. In order to hold their attention and interest they worked on study guides which had specific questions about the music. Some compositions that could be used include *Peter and the Wolf*, *Carnival of the Animals*, *Pictures at an Exhibition*, *Messiah*.

G. *Composers' Corner*: We used a filmstrip and corresponding record about the life and music of a composer. Children again worked on study sheets while listening and watching. After completing that task students took a large sheet of construction paper, printed the name of the composer on it, and then for each letter of his name thought of an adjective to describe the composer's music or life. These can be done quite artistically.

H. *Password*: Using names of instruments, composers, and musical terms children made password cards. On the back of each card they listed clues. This can be played later in class.

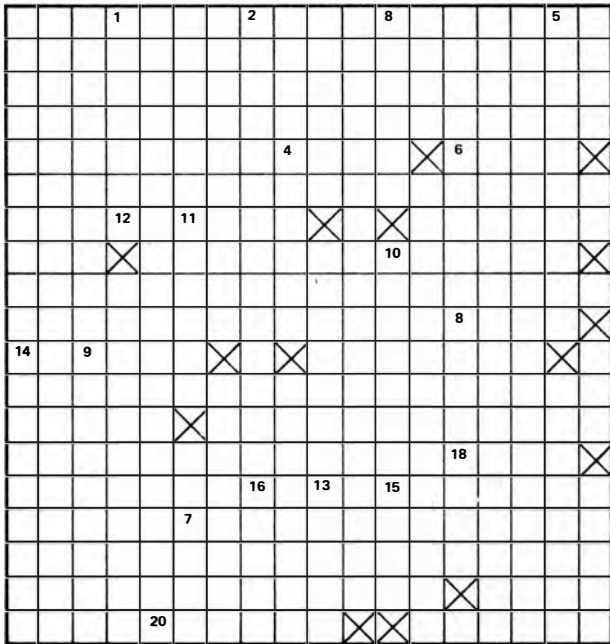
I. *Band or Orchestra Shell*: On a large piece of tagboard children drew the seating arrangement of either the band or orchestra. They used colorful magic markers. This acquainted many children with the families of instruments.

### Conclusion

I think it is obvious from this article that I believe this is a valid and workable approach to music education and that it has some definite advantages. I hope these thoughts prove somewhat stimulating and helpful.

## MUSICAL TERMS

(figure 1)



## ACROSS

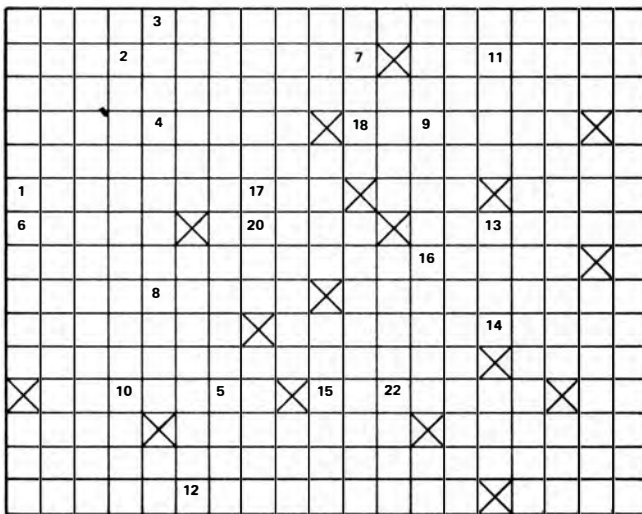
2. Gradually faster
4. Musical silence
6. Lower male voice range
8. A composition performed by 1 person
10. A lack of harmony
12. A tone that is given an extra punch
14. Gradually slower
16. Highest female voice range
18. A song of praise to God
20. Very slow

## DOWN

1. A tone that is held a little longer
3. Very smooth music
5. gradually softer
7. group of woodwin, brass, percussion instruments
8. A composition of 3 or 4 movements written for orchestra
9. Highest male voice range
11. 3 or more notes played together
13. Italian for soft
15. Lower female voice range

## MUSICAL INSTRUMENTS

(figure 2)



## ACROSS

2. woodwind; uses 1 reed, soprano and alto
4. stringed instrument; tenor range; held between legs when played.
6. church instrument
8. Keyboard instrument with 88 keys, some black keys, mostly white keys.
10. Woodwind made of silver; no reed
12. Same as 9 down
14. Same as 8 across
16. Same as 8 across
18. lowest woodwind instrument; also largest woodwind
20. Same as 11 down
22. Same as 4 across

## DOWN

1. Soprano brass; similar to trumpet
3. percussion; for each new pitch you strike a metal bar.
7. "Tubby the \_\_\_\_"
13. stringed instrument; ornamental, has pedals
5. same as 7 down
17. "French \_\_\_\_"  
"English \_\_\_\_"
15. Same as 13 down
9. woodwind, made of brass, uses 1 reed
11. woodwind; uses 2 reeds, nasal sound



## INTEREST CENTERS: An Experiment In Language Arts

by Kathryn Hoitenga\*

Most teachers would agree that integration of the various language arts, both with each other and with other subject material, is good pedagogical procedure. As Christian teachers concerned with the whole child living in God's creation, we are particularly challenged to make education relevant for a full Christian life. Yet so often we feel textbook bound; we find it hard to break away from our routine teaching patterns to new and exciting adventures.

A year ago last winter the teachers of the Walker Building of Westside Christian School in Grand Rapids planned and then took part in an experiment in language arts which is one example of many such possible adventures. Our school is small and has only one section each of grades one through six. The project is ideal for a small school. It certainly, however, could be adapted for larger schools as well.

The occasion for the experiment arose from a desire to provide a change of curriculum during

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\*Kathryn Hoitenga, who was teaching third grade when she carried on this curriculum experiment, now teaches kindergarten at the Westend building of Westside Christian School, Grand Rapids, Michigan.

educationally dull mid-winter which would re-inspire teachers and pupils toward more and better learning. We decided that room changing and re-grouping should be a basic feature of the project. Since we also felt strongly that the experience should be completely enjoyable for each child, we decided against ability grouping and in favor of grouping by interests. In view of this we agreed that the first general objective, and also the principle cognitive one, should be that of providing opportunity for students to develop their skills in reading and other language arts in an area of high interest. Since this naturally involved giving children choices, it of course would place children of all levels together. The thought of having first through sixth graders in the same room with one teacher was at first a bit unsettling. It led us however to the further objective of providing opportunity for students of all ages to interact with, respond to, and learn from each other both academically and socially. It soon became apparent that, although we were primarily concerned with language arts, we would also be including many areas of living and learning.

One of our first tasks was to decide upon subject areas to be offered. Taking into consideration what we knew about the children, we suggested a number of topics. Each teacher then chose one topic for his own. The final list included: Biography, Fantasy, Here and Now Stories, Me and My Friends, Poetry, and Westward Movement. Short, simple descriptive paragraphs about each subject were distributed to the children. From that list they made their choices.

We decided to spend four weeks on the project. Children would change rooms on Mondays and Wednesdays from 1:15 until 2:00. Afternoon recess followed so there was an extra fifteen minutes we could use, if necessary.

At this stage of our planning we presented a brief account of the project to the educational policy committee of the school board. After receiving their enthusiastic support, we also sent a newsletter to the parents outlining what we planned to do, for we naturally desired parental concern and interest.

The next step, and a very important one, was for each teacher to make his own plans, including a list of very specific objectives. He had to know which language arts skills he hoped to advance. He had to know how he would motivate the pupils. And finally, he had to decide upon procedures for promoting interaction among them.

During the next few days we were busy gathering materials. Films were ordered from libraries



and public school film services. Curriculum materials were taken from Calvin College Curriculum Center. Books were loaned from local libraries. We had an inter-school book exchange. Each of us searched his own classroom library for books on the various subjects and then redistributed these to the appropriate rooms. And we also requested all the necessary audio-visual equipment.

My own area was Fantasy. One of my primary concerns was that each child should enjoy fantasy through many and varied activities and experiences. I divided fantasy into several categories: myth, legend (folk tale), fable, fairy tale, tall tale, nonsense story, and also imaginative symbolism in the Bible. One of my objectives was that the children should become familiar with these categories and be able to make distinctions between them. In addition, my plans included involving each child in language arts activities which would promote further development of the skills he was learning in his regular classroom. Reading was expected of all. Some creative writing projects were done as class activities. Each child was also asked to choose one special project. A list of suggestions included such things as making a newspaper with news items taken from fantasies read, writing and possibly producing a short imaginative play, making a T.V. picture roll with script, and writing a tall tale. Very young children were encouraged to paint fanciful pictures and then write or tell stories about them.

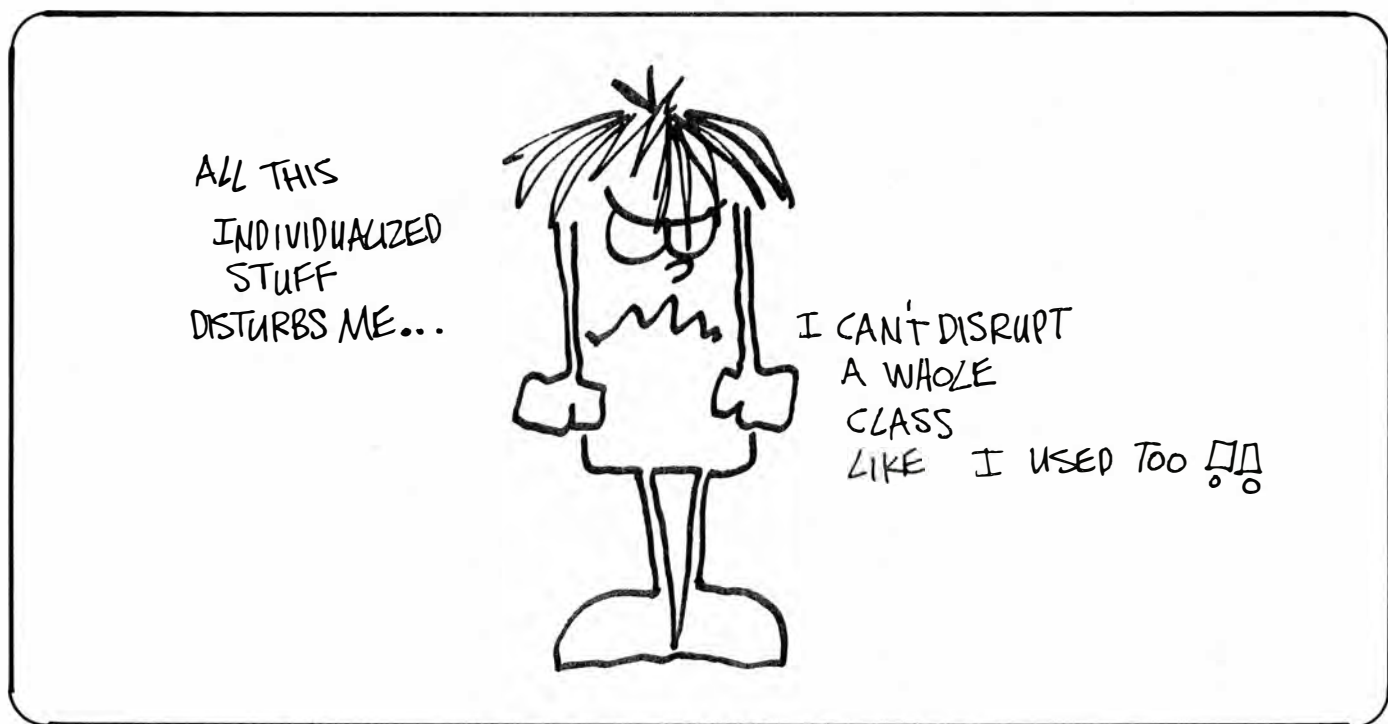
Cooperation and friendship between children of different levels was encouraged through pairing of

each older child with a younger one. This pairing provided a way for the lower grade child to receive help in his writing or reading. Several activities involved the partners working together.

I decided to organize the eight meetings according to the different categories of fantasy. This required setting up an approximate schedule to follow. The first fifteen minutes would be listening and/or viewing time for the whole group. The next ten minutes could be for discussion and planning. Each session would include fifteen minutes of free activity time for book browsing, reading or working on projects. The final five minutes would be for evaluation and announcements for next time.

The importance of planning and preparation cannot be stressed too much. Only when I knew exactly what my objectives were and had arranged for every detail could I hope for a good session. Films to be shown were previewed to insure worthwhile pre-showing and follow-up activities. Furniture had to be carefully placed to suit the activities of the day. I also scattered the books in different areas around the room. This was to avoid needless congestion during browsing time.

One especially effective activity was the writing of a tall tale. This was done to help the children understand how some of the folk legends evolved. I wrote a "story" which was a simple factual statement of a current dramatic event. The class as a whole did not read it but were told that it was true. They then took turns passing it from partners



to partners—each set of partners rewriting the previous statement and embellishing it with more drama. Of course no pair knew about any earlier statement other than the one passed to it. The final product was a tall tale and quite fictitious compared with the actual historical fact. It retained just enough local color, however, to keep it regional and make it most delightful to retell.

Another worthwhile session was spent examining the imaginative writings in the Bible. There is an interesting fable in the book of *Judges* and of course much symbolic imagery in *Revelation*. Some prints of great works of art representing this imagery were helpful. During this session attention was also given to the religious fiction of Bunyan's *Pilgrim's Progress* and the C. S. Lewis series of children's books.

As a culminating activity we held a Fantasy Fair for the other students of our school to visit. All the special projects were displayed, as well as favorite books of fantasy. The anticipation of this fair provided incentive for legible handwriting and neat work.

A word should be said about evaluation. As a faculty we had decided there would be no grading, formal record-keeping, or reporting. We did, however, try to take special interest in each child's reading and writing activities and often held informal conferences with individual children. I was very pleased with the level of performance in my group. Children seemed to put forth high effort; furthermore, not one failed to finish a special project. I did, of course, keep some informal records for myself, and also wrote positively oriented evaluative comments on each child's project.

What I have described above gives some idea of what I did in my interest area. My colleagues of course had their own ways of making their interest areas exciting and worthwhile. As a staff we felt satisfied that our objectives had been met. It was rewarding to see students who rarely chose library books now reading and even taking these books home. Others who in their own classroom were often discipline problems seemed to feel freed from peer pressure, and in this new situation conducted themselves maturely. Older students often went about getting their younger buddies and reading to them. Mothers occasionally stopped in to tell of their child's enthusiasm for the project.

Through pooling of ideas and resources we think we contributed in one small way to the continuing improvement of educational theory and practice in our Christian Schools. We did break away from our routine teaching patterns to a new and exciting adventure in education.



by Arnold Terpstra\*

ECO is a newly coined word used at Grand Rapids Christian High School designating a program begun in February, 1972, entitled, "Exploring Career Opportunities."

Our program is unique in that it is completely staffed by volunteers from the constituency. These volunteers are talented, enthusiastic, resourceful, and they love teenagers. Each consultant and secretary gives a minimum of two hours per week working with students at school. In this way the ECO office is open and staffed during most of the school week, making it convenient for the students to take advantage of our services.

How does ECO fit into the school curriculum? ECO at GRCHS is a supplement to the counseling program, a concentration in an area that the counselors normally cannot specialize in as extensively as they would like.

Because of the ECO program:

1. Our staff is becoming much more aware of vocational exposure and training opportunities in the community.
2. We now have direct contact with people in the

\*Arnold Terpstra is a counselor at Grand Rapids Christian High School.

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business world who before were just names or phone numbers that could be called but very seldom were.

3. There is now direct contact with government sponsored and financed training programs that we are utilizing in a more effective way.
4. A community-school relationship and understanding is growing beyond our previous dreams.
5. The students are experiencing action in their search for vocational choice beyond which the counselor in the traditional role has the time or the community contacts to give.
6. Students are making vocational choices that give them goals for the present and at the same time many are realizing the necessity of at least a high school education and, in many cases, the need of some specialized training or higher education.

ECO is working evidence that there are volunteers "out there". However, each community is unique and will have to tailor its program to meet the local needs.

We feel that an activity of this nature is essential in education today. It is also very much work. Mrs. Thomasma, volunteer coordinator, and the volunteer corps have been the key to our development in Grand Rapids. We feel that there must be adults in every community with their kind of drive and enthusiasm for a very worthwhile cause, namely their kids.

The steering committee believes that the activity of the ECO program is just one aspect of the new look in high schools of the future and is happy to be a part of what seems to be a very timely innovation in education.

As of February, 1973, the first semester of ECO's existence, over 200 students have been interviewed at least once, and some as many as four or five times, about career plans, 130 have been on one-day exposures to job areas of interest, and several have been placed on part-time jobs and/or training situations.

The ECO program as described above deals primarily with eleventh and twelfth graders on a one-to-one basis as outlined in supplement "A".

This semester we began exposing the tenth grade students to vocational areas of their interest via group meetings during the long noon hours. An adult volunteer also coordinates this program in which experts in their field are brought in to talk to and answer questions from interested students. To date approximately 150 students have been to six meetings ranging from cosmetology to medicine.

What is the student reaction? The following are noteworthy:

1. Over 25 percent of the student body have requested vocational help or were referred to ECO.
2. Students appreciate an adult interested in them outside the school hierarchy.
3. Many have expressed thanks for being motivated to pursue vocational inquiry.
4. Many have changed their minds about previously considered vocations while others have had their ideas reinforced.
5. Students as well as adults feel a need is being met and in many cases the importance of education is made a reality to them.

The volunteers deserve more than just "thanks". They are great people meeting a need and should be recognized for going the extra mile for students.

This is how GRCHS has developed a Total Learning Program. Everyone coming through our doors can now be trained academically, religiously, and vocationally. God has led us into an exciting era. In one way education today is frustrating, but therein also lies the challenge. Join us in praising God for the challenges we face as well as the necessary talents and time He gives us to meet every challenge.

## SUPPLEMENT "A"

### ECO PROGRAM

#### Exploring Career Opportunities

#### 1. PERSONNEL

The ECO program is manned by adult volunteers from the constituency.

#### 2. PURPOSE

- a. To help students of Grand Rapids Christian High determine God's will for their lives vocationally.
- b. Help students have a more meaningful high school experience.
- c. Provide training opportunities.
- d. Develop student decision-making skills regarding his career.

#### 3. PROCEDURE

- a. Student is *referred* to the ECO office by par-

ents, teachers, counselors, administrators, or he walks in himself.

- b. Student is *assigned* a consultant for vocational counseling and planning.
- c. *Experience* in work areas of interest as determined mutually by the student and consultant.
- d. The consultant gets as involved with students on a 1 to 1 basis as necessary remembering the basic objectives of the ECO program.

#### 4. TRAINING PROGRAMS

- a. Grand Rapids Christian High School
- b. Our ECO Career Resource Personnel arrange for the following kinds of work experiences in

areas of interest to the student.

1. 1-day exposure on the job.
  2. Part time job at minimum wages.
  3. Job training situations (non-wage earning and wage earning).
- c. Kent Skill Center (Kent Intermediate School District)
  - d. Educational Park (Grand Rapids public schools)
  - e. Incentive to Learn program (Federally subsidized training program)
  - f. Chamber of Commerce Mini-Intern program
5. *ECO PROGRAM* for all students. However, the number of students who can be helped is limited to the personnel in the ECO program.

The Ontario Alliance of Christian Schools invites applications for the position of

## Education Coordinator

to serve the Christian Schools of Ontario on a half-time basis. Preference will be given to persons with professional qualifications and teaching and administrative experience in a Christian School. Task to include

- Aid to Boards and Staffs in upgrading curricula
- Establishment of a Curriculum Reference Library
- Promotion of harmonious relationships between schools, the public, and the Ministry of Education
- Coordinate work of consultants and others for the benefit of the schools

Submit applications and enquiries to:

OACS EDUCATION COMMITTEE  
Mr. R. Klapwyk, Secretary  
Hamilton District Christian High School  
28 Athens Street, Hamilton, Ont. L9C 3K9  
PHONE 389-3411 (AREA CODE 416)

# OPEN CLASSROOM:

# Yes or No?

by Elizabeth Williams\*

Similar to many articles appearing in both popular and educational magazines today is one entitled "How to Make Schools Fit for Children" (Better Homes and Gardens, November, 1972, p. 30). It pictures today's typical classroom as a teacher standing in front of about thirty children, who are seated in neat rows of desks. The teacher orates a lesson which she expects will instruct all of her children alike. The reader is assured that the teacher's idea is false. Some may find the material interesting and valuable. For some it is too simple; for others, too difficult.

Now on the horizon appear an increasing number of "progressive" educators who are ushering in a new era in education. With their system attention will be given to the *individual child*. The *human element* will appear in learning.

Dwarfing all other facets of elementary education is the great explosion concerning the "open classroom" and "individualized learning." Whole issues of educational journals are given over to these topics. Veritably every magazine carries one or more articles or reports of experiments. Educators have forgotten that there is anything else to talk about.

Let us examine a part of the background of this movement and consider whether it should rightfully have a place in our Christian school system.

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Much of the inspiration for "individualized learning" comes from a group of British primary schools. The organization and procedure in these schools have been widely publicized and seem to offer a utopia to many American educators.

## Description of System

The basic factors of these schools are the following: Children from five to five and a half years of age enter the school at different times during the year. They remain with the same group of children till they are about eight. At this age they go to the Junior school.

Instruction is informal. The teacher sets out materials which she expects will pique the interest and curiosity of the students. She and her assistants go from group to group of the children. They listen to their conversation and endeavor to direct their thinking and their experimenting that they may obtain the optimum educational benefit from their experiences. At times they gather around them a small group of children for a lesson in skills.

An in and outness prevails. The children have a freedom to use not only the halls and other parts of the building, but also the outdoors for their learning experiences.

## Evaluation of System

In our evaluation of this system of learning several factors must be taken into consideration. In the first place there is the term "traditional educa-

tion" by which its advocates call its counterpart. The use of this term indicates prejudice on the part of the speaker. He is so strongly in favor of the new system he lumps all other teaching into a stereotype as indicated in the beginning of this article. He suggests that none but these innovators have ever made changes in their teaching. None but they have individualized learning. A better terminology in this discussion is "structured classroom" in contrast with the "informal classroom."

Secondly, and of primary importance is the question: What is the personal and educational philosophy of those who are promoting schools of this type? Most of the leaders of secular education consider that they are humanists. Humanism is a man-centered concept affirming that man is self-determining. It contrasts with the Christian belief that God is the planner of life and that we conduct ourselves as a harmonious segment of God's plan and will.

Typical of the thinking of today's educators are the articles appearing in *Childhood Education*, a magazine devoted to the interests of young children. In a year's reading of this journal, the writer cannot recall one reference to God, nor to any power beyond man, nor to any moral absolutes. Continuous emphasis is put on the necessity of change in the schools that learning might be adapted to the needs and interests of the children.

One of the aspects of the British schools that reflects the humanistic philosophy is that the child is allowed to choose his own learning activities. A child is surely not capable of directing his studies in an orderly, progressive way. In our educational procedure we must be careful not to fall under the indictment of Isaiah, "All we like sheep have gone astray, we have turned every one to his own way . . ." (Isaiah 53:6).

We have heard it said, "It is not so important *what* the child learns, as the *habits* of learning that he is building." We must answer that in this great universe that God has made, surely there is a core of facts on which all knowledge rests. The child must learn these facts well, along with the skills which are his tools of learning. From these he branches out into areas of special interest. These, he must recognize, are also of God, and must be used for His glory and for the benefit of his fellow man.

Thirdly, in its emphasis on individualized learning comes the question: Is the informal classroom the most efficient method of teaching? A couple of years ago a group of us visited several classrooms in a school highly publicized for its open classrooms. All of us observed much time wasted, and many

errors going uncorrected. As a group the children were not as far along academically as those in our structured classrooms.

It is logical to think that the larger the group of children at a time that can be taught a basic concept, the more time there will be for advanced learning. If we are leading each child along one by one, there is not time for the teacher to present in a graphic way the wonderful facets of knowledge. Nor is there as great an opportunity for the exchange of ideas and information among the children.

Those reporting the accomplishments of the English schools are enthusiastic about the freedom of expression. Examples of writing that are given are below what our children are doing, both in creativity and in writing skills.

Responsible teachers have always had concern for the needs of each child, and have had different ways of caring for those needs. It is gratifying to those who teach in the primary grades to hear that a child who has had learning difficulties when small has made fine progress later on during his school years. This could not have been accomplished unless attention had been paid to his individual needs. Neither would it be likely that some of our children would score high above their grade level, if opportunity had not been given for enrichment and advancement.

A fourth point to keep in mind is the opinions of both children and parents. Though books and magazine articles carry glowing success stories, these are not the reports we hear. Many parents whose children have been allowed to "progress at their own speed" are most dissatisfied. They know their children could do better if they were prodded to keep up with the others.

One teacher whose children had been in an informal classroom the previous year listened in on their conversation as they compared her classroom with the previous one. They agreed it was much more fun to learn together. The brighter ones complained that they had to work so hard to keep ahead and the slower ones were teased because they were behind the others.

This article is not to suggest that there is no good in the British Primary system, nor in the open classroom movement, and that we can not receive helpful ideas from it. It is written to urge that we be not taken in by the high sounding words of the secular educators, but that we carefully examine each of their claims. It is my opinion and that of many of my colleagues that the structured classroom is more in keeping with the principles of Christian education.

# Recipe for Environmental Study

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by Ruth Broersma and Stanley Pikaart\*

## *Ingredients:*

1 college campus, vacant for spring vacation, including library and assorted classrooms  
100 students  
Several ninth grade teachers, willing to work "extra"  
1 principal, long on tolerance  
Many community resources

## *Method:*

Set aside some planning time—noon hours, a free period—for brainstorming and listing objectives. Plan a schedule of activities for the week. Make arrangements for speakers, films, transportation, rooms, materials, books. While all of the above activities are going on, use regular classes to prepare students for using the library, writing a research paper, and working in another place. Take the students from their usual classes for one week. Each morning give opportunities to listen,

to watch, to investigate, and to be challenged by new ideas from a variety of sources. In the afternoons send students out into the environment: to see their city, to become aware of relationships that exist between man and nature, to be impressed with responsibility for caring for the world.

## *Results:*

100 research papers on one aspect or another of the environment, most of them focusing on an ecological problem, and ranging in quality all the way from excellent to just less than mediocre.  
100 pleased students, glad to be away from their usual classrooms for a week, overwhelmed by the complexities of the problems our world faces, and satisfied that they had learned a great deal about their world and a good bit about using a library and writing a research paper.  
Several tired but happy teachers, contented that their efforts had been worthwhile and delighted with the quality of the work their students had accomplished.

The recipe worked well for us and certainly has possibilities for others. It all began in the faculty room one day when four or five of us had the rare opportunity to brainstorm without having bells

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## Imaginable Alternatives

Should all children be required to study algebra? Might they not benefit more from studying probability? Logic? Computer programming? Philosophy? Aesthetics? Mass Communications?.... Why, for example, must teaching be organized around

such fixed disciplines as English, economics, mathematics or biology? Why not around stages of the human life cycle: a course on birth, childhood, adolescence, marriage, career, retirement, death? Or around contemporary social problems? Or around significant technologies of the past and future? Or around countless other imaginable alternatives? (Alvin Toffler in *Future Shock*)

ring or classes call. We expressed some strong feelings about our respective courses being isolated from each other; we so seldom related what was going on in one class to what was going on in another. To use the words of Noel McInnes in his perceptive pamphlet "You Are an Environment," we were guilty of "....thinking the world to pieces" and never attempting to put the pieces together.

In trying to set up an interdisciplinary project we chose the topic of Man and His Environment. It was a natural choice because it does relate the separate disciplines to a whole earth concept. With all their teachers working as a team our ninth graders would be able to see the inter-relatedness of their learning, that all of us—math, science, social science, religion, and English teachers—could work together on a project of mutual importance and interest. The subject "Man and His Environment" would provide ample material for an individual research project for each student. In addition, the subject of environment is of obvious high interest at the present time; consideration of it is vital; and it has not been taught specifically in any grade.

At the outset of our planning (many noon hours), we listed some key ideas that we wanted to include in the program. There should be some large sessions (entire group) and some small groups; time for independent study for every student and a research project of his own; some time to be devoted to outdoor activities; community people to be involved.

Employing these key ideas in the interdisci-

plinary project, we hoped to accomplish the following:

- A basic idea or definition of "environment" and awareness of interaction between environments;
- Recognition of a world with limits (Buckminster Fuller's metaphor of Spaceship Earth is helpful here);
- Attitude of ecological responsibility;
- Understanding of the Biblical directives in the God-man-nature relationship;
- Awareness of crisis areas because of misunderstanding and misuse of environment;
- Sensitivity to one's surroundings;
- Comprehensive knowledge of one topic of ecological concern.

In order to use our time (which we set at a week) effectively, we felt that some preparation would be necessary in several areas. A careful explanation of the project, the schedule, and our expectations of the students was accomplished in a meeting of the entire class. All students would begin with some common background through certain required readings. The English classes would concentrate on instruction in writing a research paper and using a college library effectively. Each student would choose a topic for independent study.

With all the students hopefully prepared, teachers excited, and plans carefully laid, we proceeded through a week of the most exciting education that both our students and we had ever been involved in. The schedule for the week looked like this:

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:45	DEVOTIONS				
	Industry and Environment Consumers Power Co.	Land Use Film	Land Misuse Richard Schwieger	West Michigan Environmental Action Council Mrs. Joan Wolfe	Population and Environment Dr. Roderger Rice
10:00	15-MINUTE BREAK				
10:15	INDEPENDENT STUDY IN LIBRARY				
12:15	NOON LUNCH—Commons Dining Hall				
1:00	Religion and Environment	Land Use Bus Tour  City Planning Office	Eagle Scout Ecology Presentation "Sensitivity to Sounds" Northeast Jr. High Students	Land Misuse Bus Tour  City Environmental Protection Office	Simulation Games on Environment  Evaluation
1:40	Environment and Ecology—Definitions				
2:15	Recreation and Environment				
2:55	LIBRARY OPEN UNTIL 5:00				
5:00					



In a new and more open setting with no bells or normal classroom routines and a necessarily flexible schedule, discipline could be a problem. As a matter of fact, we found that it was not. The students had been made aware of the situation before they were in it, they knew exactly what was expected from them, and they accepted their increased responsibilities even better than we had anticipated.

As the schedule indicates, we set aside a little time on the last afternoon for a short evaluation. The students could rate each of the events of the week on a scale of very good to poor, and more important to us, could express their thoughts about the total project in a paragraph or two. Their reactions to various activities were, in general, what we had anticipated—from “ho-hum” to “very good”—but their comments thrilled us.

“I really loved this whole week. We had so much freedom. We were all given a big responsibility and we all did well. Let’s do it again!”

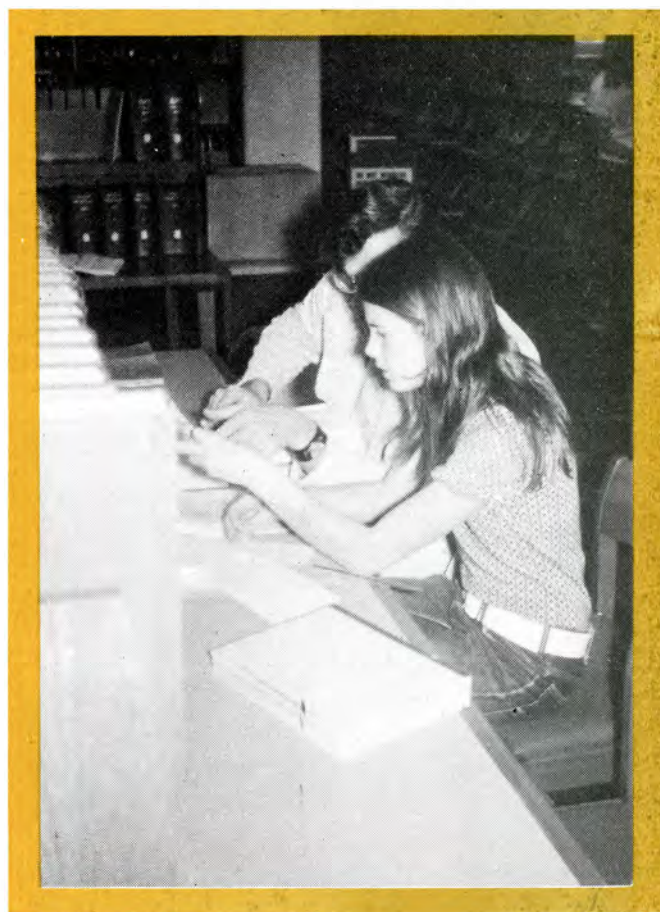
“I liked most of the movies and disliked speakers when they talked about things I didn’t understand (e.g. land-use men). I *loved* working in the library and wish we could have had more time doing it. I think more than anything else, this week made me realize something must be done *now*, and *we’re* the ones to do it. Thank you for letting us do such a special project for a week!”

“I really learned what ecology was this week. Not just pollution which many people think. I’m going away with a better understanding of our environment and even its relationship with God.”

“This week probably was the best week this school year. I had a lot of fun, but I also learned a lot. If I had to do it over again I wouldn’t like to hear from the eagle scout. This week had a lot of effects on me; I listen closer to what’s going on around me and really look at things carefully.”

“I especially liked using Calvin’s facility. I liked the bus tours because we saw our city and not someone else’s. I thought the films were terrific except for the Boy Scout. But that’s just one bad thing. Otherwise it was tremendous. I’d love to do it again. I can’t express what I learned in cold facts but I learned to appreciate our environment and learned that all parts are beautiful. I was never bored. I liked it because we didn’t have to keep such a tight schedule. It was great!”

“One thing about it that was good was that no two things were really alike. There was a lot of variety. I disliked the Tuesday bus tour. It was a real bummer.”



Sylvan students in Calvin library.

“It has changed my whole idea about the environment. For example, my term paper really changed my idea about wildlife and snowmobiles.”

“When I came here this week I thought to myself that I wasn’t going to get involved or pushed into this ecology bit mainly ‘cuz I was really sick of all those posters saying things like “Ecology Now”. I mean really sick. But I wasn’t pushed into anything and began to realize how much we have to work to save our world. I enjoyed taking a close look at the world around us, and I learned a lot writing my term paper. It didn’t seem like a chore—as I thought it would be.”

Students appreciated the variety, the new faces, a different atmosphere, and increased responsibilities for themselves. Alternative programs to traditional education can provide these at least for short periods during the normal school year. Our recipe involved taking some risks. How could we know what speakers would say or even if they would show up? (One didn’t.) It involved working overtime, considering new possibilities, and even twisting arms, but all of these, risks included, were what made the project exciting for us and for our students.

## Using Students as Teacher Aides

by Marjorie Bantjes\*

The kids were not studying: some because their assignments were finished, others because they had no desire. Study halls in junior high were characterized by boredom and boisterousness.

Then, someone came up with the idea of having volunteer tutors from junior high work in the elementary grades. The elementary teachers were consulted and with parental consent a number of junior high students signed up to tutor in lieu of their study period.

Renee came into our first grade class excited and eager to help either one child or a small group. She appeared interested in the curriculum and in the children. She showed up faithfully two periods each week.

Not only did our class benefit from Renee's help, but her own ideas about a future career were being jelled. She enjoyed working with the children and has aspirations of being a teacher or child psychologist.

To show her appreciation for being allowed to tutor in our classroom Renee arranged a party for the last period, and I was touched when she presented me with a lovely cake which she and a friend had baked and decorated.

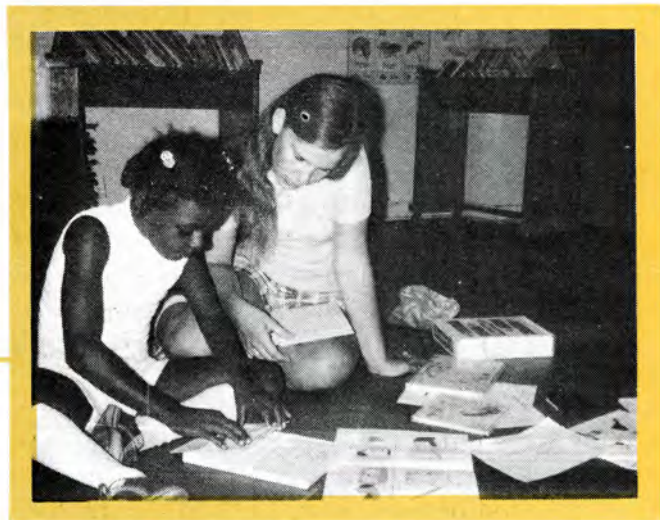
But Rick was another matter. In a weak moment I also volunteered to take Rick as a tutor. He was labeled as an "outcast" by his peers and a "cast-out" by his teachers. His disruptive behavior had warranted suspension from several classes.

With a look of apprehension and gloom Rick

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sauntered into our first grade class. His apprehension was eased as he mingled with the children and became acquainted with our curriculum. As he left the class that first day I detected a faint smile, sensed a challenge and uttered a silent prayer for grace to meet that challenge.



Renee and her tutee, Ivry.

Rick showed up faithfully two periods each week. He worked patiently with individual children or small groups. Not only were first graders helped, but, just as important, Rick's self image improved. These first graders made him feel important as he helped them with spelling, math, reading, drawing, etc. Some effort was made to create situations where Rick would feel needed.

Rick was involved in a fight during the last week of school and suspended.

The children were disappointed that Rick wouldn't be able to go on our class picnic as umpire for the ball game. Imagine our surprise when Rick appeared in our classroom just as we were ready to leave for the park. The children welcomed him with a joyous yell. I asked no questions and we were off. Rick was in his glory umpiring the ballgame between the two first grades. Our team won by a small margin! At lunchtime the children simply showered Rick with food and attention. They were able to give him a feeling of worth that he so desperately needed.

This interaction between junior high tutors and elementary pupils also had a side benefit of breaking down the barrier that grows between grade levels. This was noted on the playground when a tutor introduced "her kids" to some of her peers.

These were our first junior high tutors in grade one. We look forward to a more expanded program this fall. And, I would like to see the Ricks as well as the Renees signed up.

# Programmed Learning

by Gary Parker\*

When acquaintances learn that I have written several programmed textbooks, they are surprised to learn that I am also a Christian. Programmed learning has been associated so often with behavioristic psychology or a mechanistic world view that some feel programming must be incompatible with Christianity. Fortunately, there is no necessary connection between programming and mechanistic philosophy at all. The publishers of my most recent program (John Wiley and Sons, *Life's Basis: Biomolecules*) even permitted me to present creationism as an alternative to mechanistic and vitalistic concepts of life's nature and origin. Programmed learning can be a valuable aid for the Christian teacher, and I had the opportunity to test some of the benefits of programming with my biology students at Dordt College.

## What is Programmed Learning?

In many respects, programmed learning is nothing more than a carefully worked out lesson plan that requires the active participation of each student. A typical program consists of a series of units called "frames." Frames vary considerably in length and format, but each frame typically includes four parts: the student (1) is presented a bit of information, (2) is asked a question, (3) answers the question, and (4) checks his answer. New concepts are continually being built upon those introduced earlier in the program, and older concepts are continually being reviewed.

No "gadgetry" need be involved in programmed learning at all. Many of the early "teaching machines" were only pseudo-sophisticated devices for hiding the answers. Programs today generally look something like workbooks. But unlike workbooks, programs are arranged to teach the information

they contain and to permit the student to check continually his progress.

At the instructor's choice, however, programmed learning can be prepared or chosen to involve gadgetry. Programs can be spoken onto tapes rather than written into books, and programs can direct a student to work with slides, various other visual aids, or even laboratory apparatus.

Whether gadgetry is involved or not, the secret of success in programmed learning is usually identified as "reinforcement" or "feedback." Experienced teachers will recognize that this secret of success has much in common with old-fashioned "drill:" repetition and active student participation in the learning process.

## Uses for Programmed Learning

Extremists once talked about programmed learning as a complete replacement for "traditional" instruction, but most discussions now revolve around the use of programs as one among many instructional aids available to teachers. Several teachers have found programs useful for remedial work, with remedial English grammar programs receiving relatively wide use. Some teachers use programs for enrichment work with fast students; for example, a student could work on an extra foreign language with a program that contained clear directions for self-instruction and enabled the student to test his own progress.

Mathematics programs are available for either enrichment or remedial work, depending on the student's position in relationship to his class. A variety of programmed laboratory exercises are available for class use. Programmed textbooks on specific topics are available in many subject areas, and these units can substitute for conventional textbook sections in the teaching of difficult topics, topics that the teacher is not prepared to teach, topics that need more student involvement, etc. As discussed later, it seems that programs can also be used to stimulate classroom discussion, perhaps by

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providing students with a common background of concepts, examples, and vocabulary on a given topic.

### A Test of Programmed Learning

Most of the benefits claimed for programmed learning are based on the assertion that students learn and remember more from programmed *vs.* conventional instruction. I had the opportunity to test this assertion with introductory biology students at Dordt College during the spring semester of 1971. The research was conducted as part of my doctoral dissertation work, and the students knew that they were involved in an educational experiment.

One section of the class used paperback pro-



grammed textbooks I had written on cells and DNA, and the other section used my programs on biomolecules and heredity. Each programmed textbook took the place of two lecture-discussions and a conventional textbook assignment. On quizzes given after these topics, the program-taught students clearly scored higher than those conventionally taught, and on tests and the final examination students in both sections did much better on program-taught than on conventionally-taught material. The superior performance of the students following programmed instruction frankly surprised me, perhaps especially because it was my own conventional, lecture-textbook-discussion instruction that took second place.

Evaluations were also made of classroom discussions following programmed *vs.* conventional introduction of each of the four experimental topics. Again it was the program-taught students (alternately from Section A then B of the course) who did the better job. No literature reports on the subject were found, but this study suggested that programs might profitably be employed to enrich classroom discussions.

The Dordt College students involved in these investigations generally expressed a positive attitude toward programmed learning, but the students also felt that more than two or three programmed textbook units per semester would be boring. One student, summarizing the opinion of many, wrote, "I learn more from programmed learning, but I find the lectures are a more enjoyable way of learning."

My research with programming, and that of others, does not suggest at all that programming should replace conventional teaching, but it does suggest that programmed learning deserves a place with other aids in a comprehensive teaching strategy. For those who are interested, I am willing to share my own experiences with programming more fully. The following sources of information may also be helpful as a start:

(a) *Bibliography of Programs and Presentation Devices* (continually updated by Carl Hendershot, 4114 Ridgewood Dr., Bay City, Mich.),

(b) Educational Methods, Inc. (500 N. Dearborn St., Chicago) and John Wiley and Sons (605 Third Ave., New York), two publishers with programmed series,

(c) *Educational Psychology*, a textbook by Edwards and Scannell (International Textbook Co., Scranton, Pa., 1968), and

(d) a short article, "Writing and Testing Programmed Instruction," by Cooper and Mertens (*American Biology Teacher* 32: 234-236).

# One Step Back

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## Two Steps Forward

by Frank De Vries\*

Today's controversies in Christian education seem to be rooted in curriculum and pedagogy.

### Curriculum

When God created the cosmos He created it as a fantastically diverse yet integrated whole. Most of us acknowledge this. Yet few of us have worked this out in the classroom. How, then, can we actually and christianly teach from an integrated framework of reference?

All of creation is subject to God's Law-Word. Man, too, was created to live in obedient response to this Law order, but through his fall into sin his response became distorted. Yet as those redeemed in Christ we are called to renewed obedience and service. To me, at the present time, one meaningful way to do this is through the study and use of the philosophy of the cosmonomic idea.

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This truly Christian, Calvinistic framework of thought refers directly to the Christian confession of a created reality which functions under the Law-Word of God. Under this Law-Word, trees, snowflakes, and molecules all do the things (though groaningly, until the Lord's return) designed for them to be done. Even apostate man has to obey the Law of gravity. Seeing this, we also begin to understand more fully what the Psalmist really means when he talks about God's Laws and commandments as, for example, in Psalm 119.

Part of this philosophy is its theory of modality, which refers to the law spheres of a coherent creation order. A lesson utilizing this theory might treat the recent lunar exploration not simply as a scientific phenomenon. It would encourage students to answer and discuss such questions as "What is the *history* of rocketry?", "Can you *write* a poem about how it might feel standing on the moon?", "Is it *ethical* not to spend such monies on the poor?" A study of water might involve looking into boating laws, ecology, baptism, art, transportation, hydro electricity, the feel of water, the beauty of water, etc. This manner of study would help students realize how the various disciplines "hang together." It would help them see the *whole* picture instead of an unrelated part of one. A good introductory treatise of this philosophy is found in the Rev. J. M. Spier's book, *Introduction to Christian Philosophy*. (Available at \$3.95 from TOMORROW'S BOOK CLUB, 229 College Street, Toronto, Ontario, Canada; Postal code M5T 1R4.) Actually this kind of thinking isn't all that new. Note the following excerpt from an article about dualism:

And we should therefore place the child in such a schoolroom atmosphere, where a unitary view of life gives the child an opportunity to grow mentally in an organic fashion, and to learn to view all knowledge as an organic whole.<sup>1</sup>

Many of our forefathers had pretty good insights. Is it not high time we put into practice their wise counsel?

### Pedagogy

There is a Word of God which holds for growing children, teaching us how to teach them.<sup>2</sup>

Yes, it is this very same Law-Word of God that

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1. Prof. H. Van Zyl, in "Educational Convention Papers;" Educational Convention of the N.U.C.S., Chicago, August 26, 1925.

2. Dr. Gordon Spykman, in "What Makes Education Christian?," N.U.C.S. *Directory*, 1971-1972.

also holds for children. Naturally a child responds to this Law-Word as a child. Therefore it would seem wrong for a child to respond just to conform, or just to please teacher. Most of us know that much of the primary child's joy tends to become stifled after grade three. Yet the Lord's world is exciting, even today. And so the children's loss of joy may point an accusing finger directly at us.

The classroom is a community where we guide learning. As we do so, we beep. And so do the children (as do boardmembers, principals and parents). And often this beeping is something quite different from what is being spoken or acted out. Many of us are said to have an eye in the back of our head. We would do well to develop an extra ear to interpret beeps. Some of us have tended to silence beeps in children only to conclude that when beeps cease children behave desirably. But is it possible that we have set up rules to protect ourselves from our own insecurities and frustrations? Do both *our* acting and *our* beeping stimulate the positive responses we like to see in our students?

There is much talk about individualized instruction. But what are we doing other than recognizing the need? To teach individually we must meet children where they are, and may have to offer them guided choices, and freedom with responsibility. Precepts written upon hearts, rather than arbitrarily imposed rules, spell self-discipline. Never having been *taught* how to make a right decision, many graduates are confused, because often we have made the decisions for them. With such freedom, of course, children tend to become much more open in their responses. This will tend to make us uncomfortable. But their responses would be honest ones with which we can work. The problem seems not how much freedom pupils can handle, but how much freedom *we* can handle.

Further, anecdotal report cards could bring across to parents the joys of learning in a growing child. Marks tend to stand in the way of this, as well as they tend to stand in the way of a child's psychic growth.

Our Lord was angry with His disciples for not allowing children to respond according to His Law-Word for them. Let us not make the same mistake. Let the Laws of the Lord be *our* schoolmaster.

Implementation of such curricular and pedagogical changes would have to be made slowly, requiring much wisdom and insight. But their benefit to a truly Christian education would be self-evident. For under the Law that Christ came to fulfill we can actually and factually be *doers* of His Law-Word, and yet "serve in newness of spirit."

## Developing Independence Through Reading

*"What Do I Get  
to Do Today, Teacher?"*

by Beth Schipper\*

It does not take very many days with a class of 26 children to be met head on with as many widely differing abilities. The "180 day-struggle" of reaching the child below grade level and keeping ahead of the child above grade level can be very frustrating. Each of the 26 children has his own identity, his own personality, his own traits, quirks, and habits. Each child is a combination of beautiful, and sometimes not-so-beautiful talents with which God created him. As the teacher of these 26 *Christian* school children, it is my task to recognize each of these children for what they are. Each school day in a child's life must help him develop himself. If he is going to be a healthy participator and contributor to society, he must learn to see himself as he is, complete with talents and limitations. It is, then, our duty as Christian

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teachers to help each child develop those talents and interests from kindergarten on. We are not reaching each individual child if he is reading the same book, on the same page, doing the same ditto, listening to the same talking, and trying to fit the same look-alike mold of twenty-five others.

He will learn to know himself if we take the time to know him. As a result of respect from his teacher, a child will respect himself and others. He will gain confidence in the encouraging environment of the classroom, to explore, discover, and learn.

In a classroom where each child has become the focal point, the teacher becomes the facilitator of this discovery and learning. It's a big step to take, after being "top dog" for so long, to put the child *first*, *above* material to be covered and *above* our own interests. No, this does not mean letting the child do what he pleases. This is the most misunderstood and misused concept in contemporary education. The child himself will tell us he wants the organization and the discipline of goals to reach—not chaotic hit-and-miss learning.

We can make a start then by beginning with one subject area. Once you have decided which subject area you are going to start with—start *slowly*!! You, the teacher need to move slowly, if only as a favor to yourself. Keep in mind the goals of your subject area and add a little each week.

Move slowly for the children. Students who have habitually sat and half-soaked up a teacher's constant talking cannot be suddenly re-programmed as responsible, independent participators in their own learning process.

Let's take reading as an example because it is one of the crucial primary subjects. Before you can individualize in reading it is important to know where each child is in respect to the development of skills. You can achieve this by informal reading inventories (for comprehension) and by diagnostic tests.<sup>1</sup> The formal tests are very helpful in finding a pattern in the errors. This takes much time and you will be working at the actual diagnosing until October or November. Each day as you listen to a child read, or review the skills from the previous year, you are diagnosing his comprehension, his phonics, and his word analysis skills. It's a process you will continue every day of the school year. However, all of this is worthless unless you keep a written record of these results and *use* them

1. *Silent Reading Diagnostic Test*, Bond, Baylow, Hoyt, (Lyons, and Carnahan Publ.), 1970, Chicago.

2. *Stanford Diagnostic Reading Test*, Karlsen, Madden, Gardner. (Harcourt Brace Jovanovich), 1966, New York.

3. *Write*—Dr. Walter Barbe—*Skills Check List*, 3124 Harriet Road, Cuyahoga Falls, Ohio 44224.

daily to prescribe what is best for a particular child.

For instance, if Tom confuses vowel + r patterns in words, e.g., gril/girl, record it on a list of skills found under Tom's name. If Mary has difficulty with finding the main idea in paragraphs, check this on her sheet by comprehension skills.

After you have tested thoroughly and you know each child's needs and work habits, you will need materials on several levels. Those twenty-six copies of one basal series are a ridiculous handicap for the child two levels above or below your grade level. Besides, why should he read those stories everyday when there is an exciting horse story on the library shelf. Let him read the horse story! He *is* reading and enjoying it. Isn't that our goal in teaching reading?

Start each morning with a quiet reading time during which time the children may read any book they choose. They enjoy reading most if they can curl up on a rug under a table. Only two rules are necessary for a successful quiet reading time: the child must read and he *must* not talk. Most second and third grade children can read from ten minutes in September to forty-five minutes by January and they will enjoy every minute.

During this quiet reading time, the teacher is talking very quietly in a corner with a child about his book. Of course, no teacher has time to read every book, but paging through it and asking a few general questions, she can get a good idea if the child comprehended what he read. This sharing time on a one-to-one relationship is very important to the child. He feels very important because his teacher is interested in him and in his feelings about his book. One ten minute conference per week with a child is sufficient.

The second part of the reading period is the Activity Time or the time spent on skills. Skills are vital and *must* be taught: phonics, word analysis, vocabulary, and comprehension skills. Your many hours of finding each child's weaknesses and needs are now going to pay off. By looking at each child's skill sheet you can write out five activities for his week. The number of activities a child can do with the minimal amount of materials is phenomenal. They range from giving a puppet show on a book, to doing a workbook page, to playing a game called Syllable Count, or working on a crossword puzzle. Just don't bother Sam with an activity sheet on syllables when he hasn't mastered his Dolch sight words, or expect Mary to make comparisons between two stories when she hasn't mastered the simple first level in comprehension of getting facts. Sam and Mary's precious time would

be wasted because they are being frustrated with skills on a level for which they haven't had the foundation.

Here is where materials are so important. Every teacher can afford a couple books of soft cover materials on different levels. Rip them apart and glue on cardboard or manilla folders. They are durable and many children can use one book. Gather a few mothers to glue for an afternoon if your time is too scarce.

Once you've gathered a few materials dealing with specific skill areas, you can begin with five children with a similar weakness.

Write their directions on an activity card. For example one for Mary may look like this:

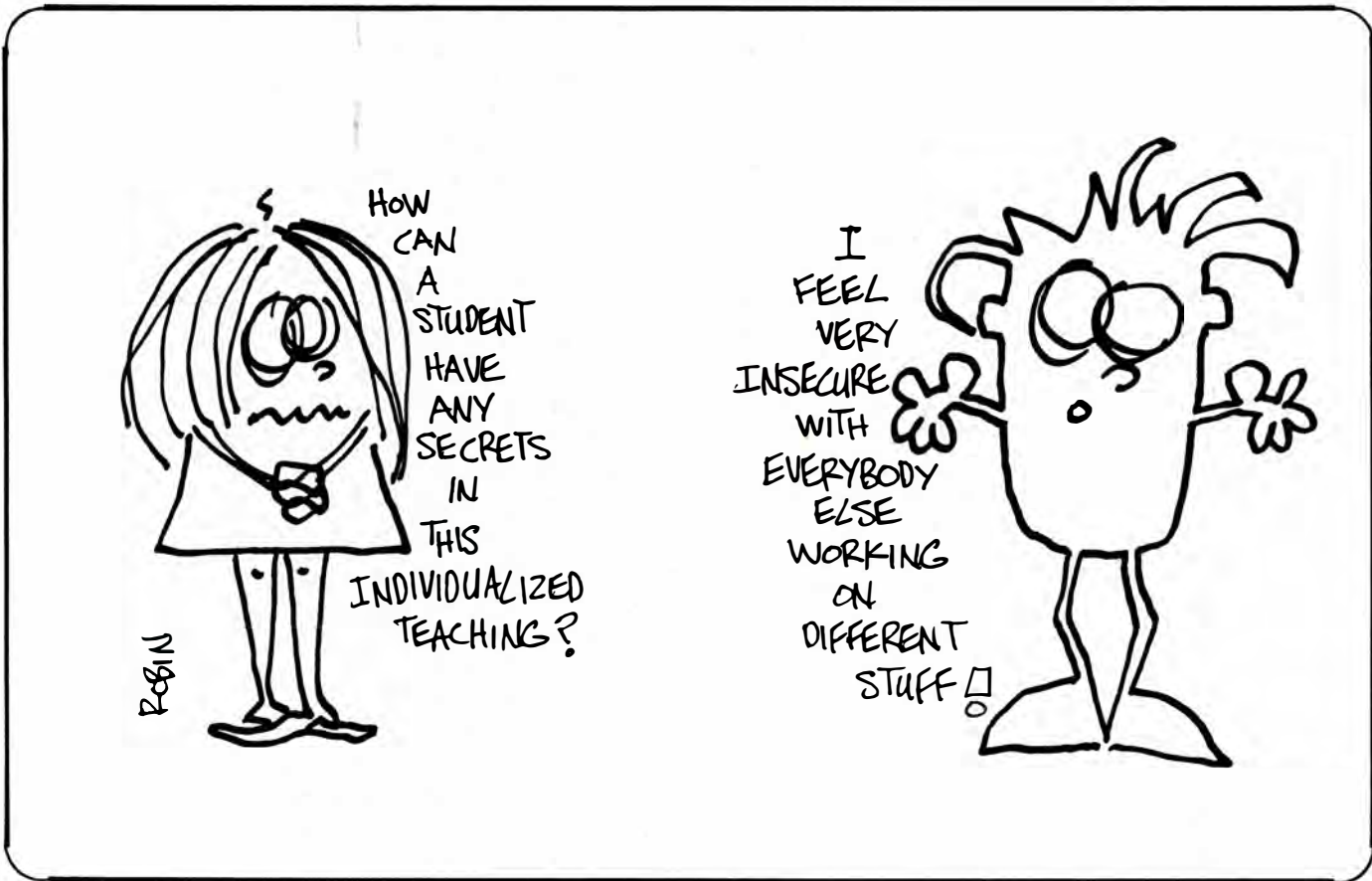
**MARY**

- Mon.* Do Reading and Thinking p. 4 & 5.
- Tues.* Do Job Card 45 on your book.
- Wed.* Do a crossword puzzle with Tom—level C.
- Thurs.* Do Reading and Thinking p. 32.
- Fri.* Play Vowel Dominoes with Pat, Tom, and Sue.

They can work independently while you work with twenty others and muster the courage to give two other children the individual help they need. Above all, move slowly, introducing each new step you are adding to their reading period.

Most children will enjoy the activity period as much as their quiet reading time. They have a variety of activities and can progress as fast as they want; they are not bored with materials that are too easy, nor frustrated with materials they don't understand. They feel important because they are given responsibilities during this independent work period.

The most exciting results of individualizing are those that are most difficult to measure. The child develops a responsibility for his actions and his progress each day. He becomes an independent learner within an environment where he is encouraged to explore and learn on his own. He is respected as an individual and allowed to read where his interests lie, and develop his abilities to the fullest. Finally, individualizing generates an enthusiasm for learning and discovering! What could be more exciting for a teacher than to see Tom rush into the classroom and hurry up to the activity chart and say, "I wonder what I *get* to do today, during activity time?"





# The MAKING of a SCHOOL and a COMMUNITY

by Frederic R. Walker\*

“First Things First!” As redundant as the slogan is, too many schools have suffered under changing priorities and ‘octopus’ problems that grow in many directions. Schools were established in Massachusetts back in 1647 to teach the 3 R’s plus religion. Later, religion faded and social growth entered the curriculum, as fewer and fewer children communicated with adults at work or anywhere outside the home. Social problems increased in size and number, and a generation gap became more and more distinct. With these problems came a deterioration of academic achievement, despite increasing tax dollars. Established schools were built for academic achievement, and little else. The pressure of society still demands the basic skills (3 R’s) but it also seeks to perpetuate traditions of mixed value—both teaching methods

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\*Frederic R. Walker, after serving as an Assistant Professor of Education at Calvin College, has assumed the duties of Headmaster of the recently organized Friendship School, East Brewster, Massachusetts.

(masses of required memorization) and subject matter (grammar terminology, Latin). Often, established schools do not have solutions for their problems, or the solutions are too difficult to implement because of taxpayer, parent, or other pressure.

Friendship School, located on Cape Cod, puts the 3 R’s first in its priorities. Then, through gradual branching it offers limited options among the “academics” and greater freedom of choice in the enrichment areas. In addition, the student participates in a unique learning environment that reaches into the community.

## Curricular Scheduling

Since parents, and society, want children to learn the basic skills incorporated in the 3 R’s, Friendship School provides this instruction the first thing each day. Under the rubric of R-Cube, R<sup>3</sup>, boys and girls of middle school age meet at 9:00 AM and, after some opening exercises, separate into different small groups or individual programs for about two hours. During this time the full time teachers and the Headmaster create learning environments and strategies to promote achievement in these basic skills. Students have no subject choices during this block of time, but do establish their own short term and long term goals—plus participate in the selection of the best strategy (or activity) to achieve the goal.

Right after the 11 o’clock break, students work on an individualized science program. In the afternoon there are two hour-long periods available during which students participate in courses involving the academics divided into three categories: Social Studies, Sciences, and Arts; or in enrichment courses related to student interests. Each of these courses runs for approximately eight weeks and includes a wide variety of offerings. Courses are scheduled four days a week, leaving Wednesday available for activities that require a large block of continuous time. This means that in addition to the R<sup>3</sup> every day, the student takes his science and then signs up for two courses which meet four days a week for eight weeks and one course which meets one day a week for eight weeks. Five of these eight week terms comprise the school year.

## Staffing

The wide selection of academic and enrichment courses is made possible by using a large number of part time teachers. Many are mothers, retired people, or privately employed men and women who

like teaching and are willing to work with a group (ten or less) in some area of their own competence. They work either an hour a day, four days a week, for eight weeks or three hours a day, one day a week, for eight weeks. All are paid; the rate is comparable to adult education salaries for comparable periods of time. As a result, children have many contacts with different adults. Those who perform well are asked to return and do other courses, but if an ineffective experience occurs the expense of money and time is relatively slight. This could only happen in an era when there are a large number of willing and capable teachers, and such an era exists right now.

The adults who conduct these eight week courses must submit a written description of their plans. Included are specific objectives for the student, involving both the required product and required participation. Some indication of the activities contemplated needs to be included, and the means of evaluation. The following represents one such offering, an academic course which is part of the Social Studies category:

**"My Town, Your Town, Our Town"**

Mrs. Lynne Hartell  
Teacher

*Specific Objectives:*

**Required Products:**

1. Each student will make a map of his town according to the criteria given in class
2. Each student will make a chart showing population growth and land use according to criteria
3. Each student will select any three articles from a "Town Warrant" (the agenda for a New England Town Meeting—the form of government used here) and be able to explain them either orally or in writing
4. Each student will select one town problem (e.g. garbage disposal, overcrowded schools, shellfish regulations, etc.) and offer a solution either orally or in writing

**Required Participation:**

1. Each student will participate in an interview with a local town official
2. Each student will attend a Town Meeting

*Activities:* Discussion in class, visitation to town offices, and Town Meeting (one evening)

*Evaluation:* Completion of each of the four specific objectives requiring a product and meeting the two objectives requiring participation.

This course, taught by a part time teacher (wife of the editor of a local newspaper), will be one of three offered during the third or fourth term of the five term year. The nature of the instruction is such that specific age or grade level is not important, as is the case in nearly every course. It is possible that an eleven year old and a fifteen year old will both be in the room with Mrs. Hartell. Some students will be given more freedom in selecting the course than others; this will depend on the judgment of the Headmaster after reviewing the student's previous school experience. Even if a student, in the judgment of the Headmaster, needs some Social Studies courses he does not have to take Mrs. Hartell's course. There are other offerings in the Social Studies category from which a selection can be made. Mr. Robert Gordon has offered a course entitled "War", Mrs. Aline Johnson has offered "Why Julius Caesar was Murdered", and so they go. The process of learning has priority over content in the academics. Part time teachers, adults who want to teach and do not have to teach, working with a small group of children for a short period of time, each opening new areas of knowledge to children, are all part of the basic philosophy and objectives of Friendship School.

In the areas of academics and enrichment, teachers are encouraged to use the Beversluis learning model which teaches students to think. This model (CHRISTIAN PHILOSOPHY OF EDUCATION, by N.H. Beversluis, National Union of Christian Schools, Grand Rapids, Michigan, 1971) when employed required the teacher to offer more than what the knowledge is, the cognitive dimension ("What is a Town Meeting anyway? What happens there?"). As important as the cognitive dimension of learning is, the moral dimension needs to be included ("What should a Town Meeting be?" or "What is good or bad about this form of government?") Lastly, the creative dimension is included ("What can a person do to bring about a change in the form of government?" or "What can be done to make the Town Meeting more effective?") The cognitive, moral, creative approach to teaching can add greatly to the meaningful activity in almost any classroom; it serves as one of the underlying foundations of the philosophy of teaching at Friendship School.

### **Community Involvement**

Future plans for the school involve a working relationship with a community for retired people. This is being constructed on land formerly owned

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by the school. Agreements have been made for the school to use any facilities open to the residents. Planned, or already available, are tennis courts, swimming pool, one thousand feet of beach, an all-purpose building, and more. Some of the retired residents will take part in the school's program. Furthermore, some children will be assigned certain 'shut-ins' for visitation and possibly serving a hot meal as part of a 'meals on wheels' program. Many more plans are on the drawing board, all involving children and adults in a community setting. The initial financing of Friendship School came through the sale and lease of land to a "Planned Unit Development", as contrasted with the conventional "egg crate" condominium, but not without including the integration of the school and the Development. The outlook for what may eventually be a truly unique distributive education program is very optimistic.

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Such a program has come into existence largely through the foresight of Mrs. Nancy Woods, the Director of Development for Friendship School. Many developers wanted the school's property, but only one shared the educational concerns of the proposed program. Other distributive education programs are struggling because they are superimposed over an existing community. This is not the case at Friendship School; instead a whole new community is being created with clearcut understandings at its onset.

Combining business and educational expertise is entirely possible in any community. Since the independent school does not have every taxpayer in the community peering over its shoulder, it is in a unique position to investigate the possibilities in this form of blending education with private enterprise. What it takes is some active research, and a lot of courage.

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## Where The Action Is

by Robert H. Watford\*

The Social Science Education Consortium and the Resource and Reference Center look at programs that broaden the scope of social studies in elementary schools. As the "sixties" produced a wave of "new social studies" programs, the seven-

ties are producing reviews and analyses of materials that provide a wide range of learning experiences especially for elementary students. The Social Science Consortium, located in Boulder, Colorado, has become the national clearinghouse for social science and social studies information. Through its Resource and Reference Center, dissemination of information has taken on new dimensions. The purpose of the RRC is:

1. To provide students, classroom teachers, college methods professors, curriculum developers, and other educational decision makers, facilities for work with new social studies curriculum and ERIC materials.
2. To provide these decision makers opportunities to interact with national experts in social studies/social science education.
3. To establish a center for social studies/social science education information retrieval, analysis, and referral.
4. To establish a resource base for training in use of new curriculum materials and strategies.
5. To personalize utilization of information and resources to meet the needs of educational decision makers.

Individuals or groups may use the services of the RRC which include workshops, demonstrations, and consultation at the center without cost. Programs conducted in schools and universities can be arranged at minimal expense. Many teachers and students use the center to obtain information by phone or correspondence.

Much of the information concerning ongoing programs and curriculum development in school

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districts throughout the United States comes from visits and workshops conducted by the Consortium staff. During the 1972-73 school year, close to forty states will have been visited by staff members. If you know of programs meriting our attention please forward a description and the name of a contact person to our office so that we may provide for continual up-to-date information on "where the action is."

The following materials and programs are representative of the variety available in elementary social studies at the present time.

**1. University of Michigan:** Elementary Social Science Education Program *Social Science Laboratory Units*, authors Robert Fox and Ronald Lippitt, published by Science Research Associates, 259 East Erie Street, Chicago, Illinois, 60611.

This seven unit package of materials uses a modified laboratory approach for the intermediate grades in elementary school social studies and involves the students in gathering, organizing, and using data concerning human behavior. Materials include a student text, Project booklets, a teacher's guide, "The Teacher's Role in Social Science Investigation," and L.P. records. Except for Unit I, which should precede any others, the topics of Units II-VII do not require any specific order. Materials may be used as a course or as supplementary material for existing courses of study.

**2. San Francisco State College:** *The Taba Program in Social Science*, published by Addison-Wesley Publishing Co., 2725 Sand Hill Road, Menlo Park, California, 94025.

*The Taba Program* (K-8) is designed to enable students to acquire knowledge, academic and social skills, and selected attitudes. Heavy emphasis is placed on thinking skills divided according to three student tasks: concept formation, inductive development of generalizations, and application of principles. Social Science concepts form the academic design of the program. Both cognitive and affective learning is stressed in the teaching strategies. Teachers are encouraged to use additional resources provided in the teacher's guide rather than restrict themselves to the published student materials.

**3. University of Colorado:** *Our Working World*, author Lawrence Senesh, published by Science Research Associates, 259 East Erie Street, Chicago, Illinois, 60611.

*Our Working World* (1-6) is designed to introduce children to the fundamental principles underlying the functioning of the social world and to

relate children's experiences to these principles. The program also introduces the child to the analytical tools of the social sciences, their uses in discovering cause-effect relationships in society, and the order that underlies our seemingly chaotic world. The child's experiences with the real world are used as points of departure. *Our Working World* is a multi-media program with print and audio-visual material integrated throughout.

**4. Educational Research Council of America:** *Concepts and Inquiry*, published by Allyn and Bacon Inc., Rockleigh, New Jersey, 07647.

*Concepts and Inquiry* (K-12; 8-12 not yet available) is an interdisciplinary, multi-text, multi-media approach to social studies education. It is designed to develop a sequential and cumulative program which stresses basic concepts, skills, and learning processes. The teachers' guides for each level contain the rationale, teaching strategies, and course structure for implementing the program; as such, the guides provide in-service courses in the content and methodology of the new social studies. The program contains a large variety of activity-oriented exercises with accompanying readings that are short and concise. *Concepts and Inquiry* stresses traditional American values such as loyalties, individual freedom, and respect for the rights of others.

**5. The Center for the Study of Instruction:** *The Social Sciences: Concepts and Values*, published by Harcourt Brace Jovanovich Inc., 757 Third Avenue, New York, New York 10017.

*Concepts and Values* is a K-8 interdisciplinary social studies program. The primary objective of the total program is to provide elementary students with varied opportunities to observe and analyze human behavior and environments utilizing both individual and group process inquiry. Many activities involve non-reading and non-verbal skills while others provide in-depth readings and projects for more able students. *Responsibility* is the sustaining theme of the program—responsibility for oneself, for mankind, and for the environment. Concept-seeking, values-seeking, and problem-solving form the rationale for this sequential series of learning experiences.

**6. University of Minnesota:** *Project Social Studies, Family of Man*, published by Green Printing Co., 631 8th Avenue North, Minneapolis, Minnesota, 55411 (for print material); and Selective Educational Equipment Inc., 3 Bridge Street, Newton, Massachusetts, 02195 (Media material—SEE kits).

The student reading material and texts are a

separate entity in this program; they are not necessary for the use of the SEE kits which may form either the base of study or be used as a supplement. Because they are more unique, the multimedia kits, which contain guides for their use, are reviewed here. The *Family of Man* kits include: "Hopi Indian Family," "Japanese Family," "Family of Early New England," "Ashanti Family of Ghana," and "Kibbutz Family in Israel," Each is a separate and distinct kit, but all fall within the realm of Family Studies. To illustrate a particular family or community, each kit contains artifacts, study prints, filmstrips, cassettes, trade books, costumes, printed originals for reproduction, a Teacher's Resource Guide, and a copy of "The Rationale and Overview" by Edith West.

**7. Databank System**, published by Holt, Rinehart & Winston, 383 Madison Avenue, New York, New York, 10017.

This program (K-6) develops an inquiry system with content selection by levels entitled: *Inquiring About Myself; Inquiring About People; Inquiring About Communities; Inquiring About Cities; Inquiring About Cultures; Inquiring About American History; Inquiring About Technology*. The *Databank System* is an information storage-retrieval system used by elementary children in the conduct of their inquiry. It contains filmstrips, film loops, data packs, data cards, records, games, simulations, data masters, and data foldouts. Each grade level topic contains a basic text and a data bank for that particular theme. Specified performance objectives are included as well as teaching strategies. If resource materials are indeed reasonable components of motivation, appealing to varying abilities, retaining interest, and developing individualized learning, then the *Databank System* is one good option.

**8. Boston Children's Museum: *Materials and Activities for Children (MATCH)***, produced by American Science and Engineering, Inc., 20 Overland Street, Boston, Massachusetts, 02215.

*MATCH* units contain a variety of realia, films, pictures, games, maps, records, filmstrips, reference books, and a Teacher's Guide. There is no text *per se*. Currently three boxes are available commercially: "The City," grades 1-5; "A House of Ancient Greece," grades 5-10; "The Japanese Family," grades 4-6. The publishers provide a mini-museum and believe that when students are actively involved in coordinated learning experiences with non-print media, learning is real. The units are interdisciplinary with emphasis on anthropology, sociology, geography, and history. Content from other fields such as art, music, literature, and religion are woven into each learning system. The *MATCH* units include content which permits students to observe, manipulate, hypothesize, and form conclusions on their own. A great variety of learning experiences are provided in easy-to-carry durable cases.

Although information is obtainable from the publishers, the Social Science Education Consortium welcomes your inquiries about these or any other programs relative to social studies education. *Contact:* Social Science Education Consortium, Resource & Reference Center, 855 Broadway, Boulder, Colorado, 80302; 303/443-2211 ext. 8155.

For information about publications such as *Profiles of Promise* (reviews of exemplary programs in schools across the U.S.), the *SSEC Newsletter*, *Simulation Games Book*, *Data Book* (detailed analysis of projects, textbooks, and games and simulations), occasional papers, and other material, contact the Director of Publications at the above address.

## Social Studies Editor Jottings.....

*At our CEJ "summit meeting" held last October at Trinity Christian College, much concern was expressed about the absence of material dealing with the elementary teacher and her (his) problems. The consensus of the various department editors and others was that the CEJ had indeed been very secondary or college oriented and that it was high time to make an effort to recognize the elementary school curriculum and its impact. It is not my intention to take this space (at this time) to defend our previous position or to ask why our elementary teachers have been so hesitant to crack this*

*so-called hierarchy of educational exchange. Instead, I have submitted the above article written by Mr. Robert Watford of the Social Science Education Consortium. Mr. Watford wrote this article especially for the CEJ readers and we hope that his article will stimulate interest, questions, and comments from our elementary teachers. Hopefully, in future issues we will be privileged to see in CEJ the work of many of our teachers who are involved with "kids" in grades K-6.*

*J.T. Vander Meulen*



**I.M.S.:**

## **Individualized Mathematics Systems**

**by Paul Witte\***

“It’s funner, this I.M.S.” “Why do you think it’s funner?” “Because I can go faster than I could before. I can correct my own. I know what I’m doing.”

“What do you think of this I.M.S., Sue?” “It’s great. I can understand math now.” “Couldn’t you before, with the textbook?” “No, I had to do the same as everybody, except I always could do just half of what everybody else did.”

“How do you like I.M.S., Bart?” “I like that I can go from level to level, instead of in a book, page after page.”

Well, “Teach”, what do you think of I.M.S.?

### **What is it?**

I.M.S., Individualized Mathematics Systems, is just that—a system, or organization of materials which presents the necessary skills of elementary mathematics in a logical succession of separate steps, most of which children can master by working on their own in the classroom. In a way, I.M.S. is based on the truth of an old maxim: “Nothing

succeeds like success.” With each step that is accomplished a child is highly motivated to move on to the next.

I.M.S. is not a textbook or a workbook, but a sequence of separate workpages covering the skills of elementary mathematics from a number of different angles. Illustrations are widely used throughout, and teacher-directed activities, student projects, and the application of a large number of manipulative devices are written directly into the program.

The sequence of separate pages is organized into folders by skills, starting with the most basic topic and its most simple skills. Each topic at each level has several skills to be acquired and those skills comprise a unit. For example, topic one, Numeration, at Level I has eleven skills; those eleven skills at Level I make up the first unit in Numeration. Topic four, Multiplication, at Level V has six skills. Those six skills at Level V make up the fifth unit in Multiplication. Topic seven, Applications, at Level IX has four skills. Those four skills at Level IX make up the ninth unit in Applications, and so on. There are eighty-seven such units in I.M.S. and each unit contains one to eleven skills to be acquired, making a total of 376 skills. Just recently an entire topic of Geometry has been added.

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\*Paul Witte is the principal of the elementary school of Westminster Christian School, Miami, Florida.

Another unique feature of I.M.S. is that each separate page is laminated and students write on them with a special marker. When work is completed, pages can be erased by rubbing them with a paper towel or tissue. The pages, therefore, are not only durable but reusable. The I.M.S. pages also are strikingly attractive and this in itself has much to offer in terms of pupil motivation.

### What is the teacher's role?

Because the I.M.S. program enables children to work alone much of the time, the teacher's role is clearly somewhat different than it was in the traditional textbook approach to mathematics. It is certainly no less important, however. In I.M.S., teachers direct a number of learning activities—that is, they teach but with small groups or individuals rather than with the class as a whole. They must understand the tests that are an integral part of the program and know how to interpret their results in terms of appropriate individual lesson plans. They must appreciate the varying paces and learning styles of children and be ready to assist each one at whatever level he may be working. In short, teachers are an essential element of I.M.S. But, since the materials will do much of what they did before, they are now free to use their skills where they will make the most impact, in responding to the particular needs of each child.

I.M.S. is now commercially available from Ginn and Company. Initial investments are somewhere between ten and twelve dollars per student. Maintenance of the program ranges generally from one to two dollars per student per year.

### Is it worth it?

No system can foresee every problem or offer every solution. Someone is needed to react. At the beginning teachers will find that management is a priority. As children proceed in the program the task becomes chiefly one of guidance and instruction. The teacher's role changes which sometimes is difficult. Better education forces changes in people's thinking and acting.

Individual students are taught. With I.M.S. there is really no choice for the teacher other than to attempt to meet individual needs of students. Meeting these needs in an organized manner makes it worth it.

Additional supplementary mathematics materials such as practice drill kits are necessary for student retention of facts.

In-service instruction for teachers is absolutely

important and vital. One good suggestion for beginning I.M.S. is to begin only three or four classes at a time. Principals: you will become involved. Here's a chance to get into that classroom, where education "is really at".

I.M.S. is a systems approach to individualizing. Is it needed? Is it worth it? Yes, to both these questions if a desire exists to meet needs of children as individuals. God made each one of His children different. This program enables the Christian teacher to meet the needs of each different child. A child grows physically and spiritually as an individual. It's time we educate individually.



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