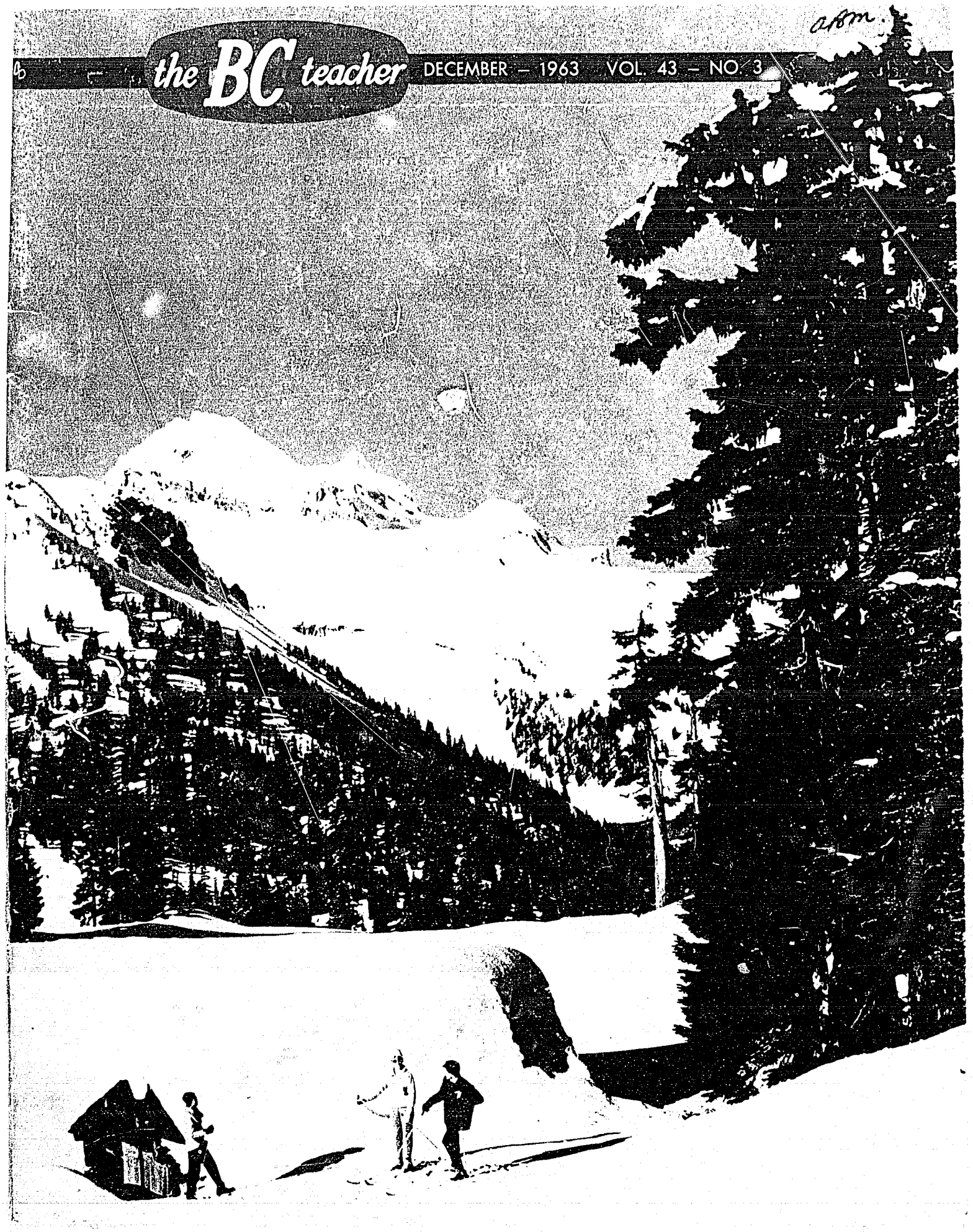
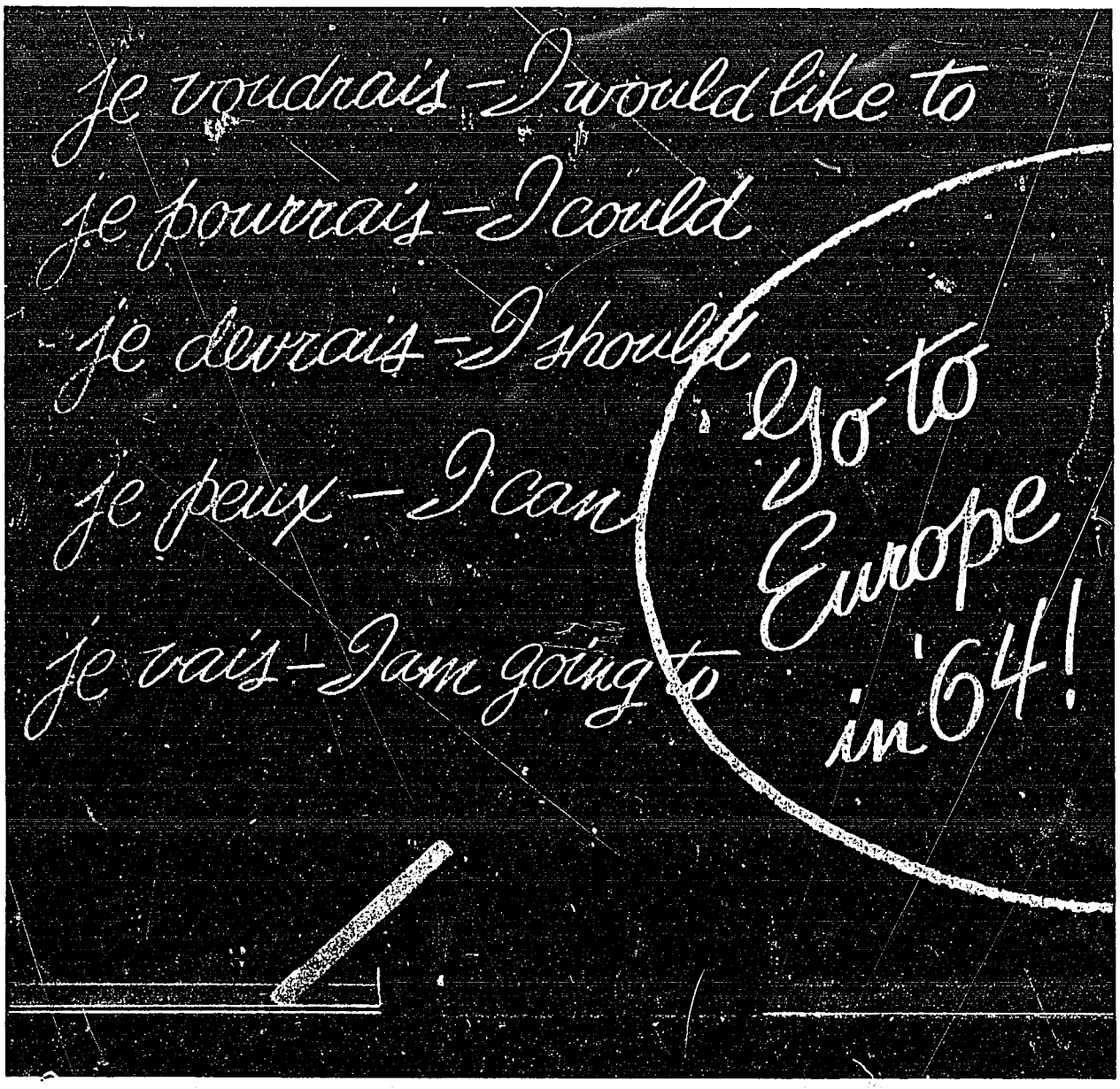
the BC teacher DECEMBER – 1963 VOL. 43 – NO. 3





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*

The conditions provide that the award shall be made annually to the Federation member (or ex-member who is no longer eligible for membership), or to a member-Association, who or which has made, in the judgment of the Trustees, an outstanding contribution to education.

*

Nominations of candidates for the Award may be made by any Federation member or by any Local Association of the Federation. Each nomination should be accompanied by a description of the work for which the award is claimed and supporting evidence should also be sent. Meritorious work on behalf of the Federation or any Local Association may rightly be included.

*

Nominations must be received by the General Secretary at the Federation Office, 1815 West 7th Avenue, Vancouver 9, B.C., not later than February 20, 1964.

the BC teacher

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IN THIS ISSUE

"The Initial Teaching Alphabet," by John Downing, describes a new system of teaching reading with what is sometimes called the augmented Roman alphabet. See page 112.

The text of a brief presented to the Government of Canada by CTF begins on page 117. It deals with the inequalities of educational opportunity in various parts of Canada.

Both teachers and school boards are concerned about responsibility for auto insurance when students are transported in private cars. The article on page 123 discusses this problem.

Eugene Turney, an industrial education teacher on the staff of Mount Baker Secondary School, Cranbrook, makes a plea for a broader base for shopwork courses. See page 125.

Some fifty students, teachers and special lecturers spent a spring weekend in "a scholars' retreat." Maurice Gibbons describes the project and its results in the article which begins on page 126.

OUR COVER PICTURE

Our cover photograph shows part of the Garibaldi Mountain winter playground. The picture was supplied by the Photographic Branch of the Department of Recreation and Conservation.

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the Editor comments

We Resent Uninformed Criticism

WE'RE FED UP with hearing how soft a job teachers have, how short the hours are, and how long the holidays are. Almost invariably people making such statements know little or nothing about a teacher's job. Unfortunately, their loquaciousness seems to increase in direct proportion to their lack of knowledge.

Take the short hours charge, for example. It usually goes something like this: "Teachers? They work only 5½ hours a day, 5 days a week. Pretty soft!" How anyone can seriously make such a ridiculous statement has always been a source of wonder to us. We've never been able to figure out why supposedly intelligent people who just take it for granted that a doctor does much more than see patients, or that a lawyer has much to do before he appears in court, will blithely ignore the fact that a teacher has much more to do than merely appear in a classroom for five hours a day. Who do they think prepares the lessons, consults with students and parents, completes endless records, marks mountains of papers, and supervises any number of extracurricular activities?

Two surveys, conducted independently of each other, have indicated that B.C.'s teachers devote an average of 50 hours a week to their teaching duties. This is soft? Yet the demands on teachers are constantly increasing. More is expected of them, and they have large classes with which to cope.

And how about those holidays? Even ignoring the many hours teachers voluntarily spend on weekends and during vacations in attempting to keep abreast of the "explosion of knowledge" and the complete reorganization of the school system, they still devote as much time each year to their work as do most Canadians. The Canadian Department of Labor states that paid vacations of three or four weeks are rapidly becoming general practice. A person working a 44 hour week and having three weeks' vacation could work a maximum of 2156 hours a year, less statutory holidays. B.C.'s teachers devote an average of 2125 hours a year to their work. We don't intend to get involved in a battle of statistics, but we think the foregoing figures are significant. We quote them to indicate that teachers do, in fact, do a full year's work in the ten-month school term.

As for teaching's being a soft job, perhaps the best reply to such nonsense is, "You try it!" People who have never taught cannot possibly realize the strain involved in the work. Bertrand Russell, the great English philosopher, put it this way: "The people who are not accustomed to teaching have no idea of the expense of spirit that it involves. Clergymen are not expected to preach sermons for several hours every day, but the analagous effort is demanded of teachers." The emotional drain on teachers cannot be equated with a simple schedule of x hours a week of work.

We welcome criticism if it is based on fact. But we become incensed when our efforts to provide society with perhaps its most important service are constantly belittled by uninformed, unthinking, self-styled experts on education.

If teaching is so attractive, why is there such a desperate shortage of teachers?★

Teachers *Must* Know Their Subjects

UNDER SPONSORSHIP of the B.C. Educational Research Council a successful research seminar on the teaching of French was held recently in Vancouver.

Because the oral-aural approach to the teaching of modern languages is now in vogue, the program featured an evaluative report of the Department of Education's experimental project for the teaching of French in elementary schools and a discussion of problems inherent in the administration of oral language testing.

The report attempted to evaluate the students' fluency and knowledge of the French language, and to compare the results at the end of Grade 10 of students who had started their study of the language in elementary schools with those of students taking the regular French 10 and 20 courses in secondary schools. As one would expect, the students in the experimental group did significantly better on the average than did the students in the control group on the oral-aural tests.

We do not intend to discuss here either the seminar as a whole or the total results of the evaluation of the experimental project. Proceedings of the seminar will soon be published and made available to modern language teachers and others interested in the subject. However, we were particularly impressed by one point, relevant to the teaching of any subject, that arose out of the evaluation report.

The point is a very obvious one, and has been stated over and over again. Yet, while accepted in theory, it is too often ignored in practice. More important by far than curricular organization, methodology, or instructional aids is the professional competence of the teacher offering the course. The corollary is, of course, that no teacher who is not a master of the subject he offers can possibly be accepted as professionally competent.

Although they assumed they were dealing with two groups, one experimental and the other control, the evaluators of the experimental French program discovered that they were actually dealing with three. The control group was found to include students taught by teachers who were themselves not competent in oral French, and other students taught by teachers who were as fluent in the French language as teachers handling the experimental group. Control group students taught by teachers who were themselves masters of the French language did as well on the oral-aural tests as (in some individual cases better than) students in the experimental group.

The implications are obvious. School authorities should not assign teachers to subjects for which they have not been prepared. Teachers should refrain as much as they can from accepting assignments they are not properly prepared to fulfil professionally.

Deficiencies arising from inadequate professional preparation show up clearly in a program such as oral French. They must exist in all programs; we should not shut our eyes to them just because they are not always so obvious.★

Project Africa Plans for 1964

CANADIAN Teachers' Federation has sent word that there is every indication that the program of giving summer teacher training assistance to African countries will be repeated in 1964.

Three countries are being considered for 1964—Kenya, Uganda and Nyasaland. It is likely that there will be greater emphasis on the teaching of English. There is also great need for mathematics and science at the late elementary or early high school level and perhaps social studies.

The Vacation Courses will last five or six weeks during July and August. They will be planned jointly by CTF and the African teachers' organization in the country concerned. The teaching staff will consist of the Canadian teachers and an equal number of well-qualified African teachers.

Interested teachers are invited to send their names to the General Secretary, BCTF, before the deadline of December 31. Application forms will be sent out when ready, probably early in the new year.

Children learning to read with i.t.a. have demonstrated an astonishing superiority over those taught by conventional methods. This account is the first of two articles on new alphabets written especially for this journal.

The Initial Teaching Alphabet

JOHN DOWNING

IN SEPTEMBER 1961 four hundred children in England began to learn to read with a new alphabet specially designed to give young children confidence in reading through a greater certainty of success in the early stages. Two years later the number of pupils in the British Isles using this Initial Teaching Alphabet (also known as the Augmented Roman Alphabet) has grown to more than eight thousand. In addition, many schools in the United States and Canada have begun to apply the new alphabet in the teaching of reading and writing.

Sir James Pitman is the inventor of the Initial Teaching Alphabet (i.t.a.). His idea is that young beginners should use the more simple and more reliable i.t.a. until they have become confident and fluent in reading books printed in it, and that they then should transfer their skill and confidence to reading books printed in the traditional alphabet and spelling of English. The characters of i.t.a. and its rules of spelling have been very carefully designed to make it easy for children to transfer from i.t.a. to standard print. The close compatibility between i.t.a. and the conventional print may be judged from the i.t.a. passage shown in Figure 1.

the first book ov mœzez cauld

jenesis

chapter I

in the beginniŋ god creeæted the heven and the erth.

2. and the erth woz without form, and void; and darkness woz upon the fæs ov the deep. and the spirrit ov god moovd upon the fæs ov the wauterz.

3. and god sed, let thær bee liet: and thær woz liet.

4. and god sau the liet, that it woz good: and god divieded the liet from the darkness.

5. and god cauld the liet dæ, and the darkness hee cauld niet. and the eevniŋ and the morniŋ wer the first dæ.

6. and god sed, let thær bee a firmament in the midst ov the wauterz, and let it divied the wauterz from the wauterz.

7. and god mæd the firmament and divieded the wauterz which wer under the firmament from the wauterz which wer abuv the firmament: and it woz sœ.

Figure 1

In Britain i.t.a.'s effects are being carefully studied by the Reading Research Unit at the University of London Institute of Education. Our research into the new alphabet is planned to extend for several years to come, and therefore it is clearly too early to draw definite conclusions on i.t.a.'s general effectiveness. However, the objective evidence collected during these first two years appears to support strongly the two basic hypotheses we have been testing:

1. The conventional alphabet and spelling of English seriously impairs children's ability to learn to read and write. We therefore need a new alphabet and spelling more suited to the beginning reader.
2. Children can readily transfer their reading skill from i.t.a. to standard print.

Why We Need A New Alphabet for Beginning Reading

In our research we are comparing attainment of children using i.t.a. with the achievements of pupils learning with the traditional alphabet and spelling. Everything except the one factor of the alphabet and spelling is being held constant in the two groups of classes.

If the reading attainments of the two groups differ widely, therefore, we may trace the cause to differences in the alphabet and spelling.

The progress of the two groups has been very different indeed. After only five months the four and five year old beginners who were using i.t.a. materials were significantly in the lead and their superiority increased as the months went by. For example, 25% of the i.t.a. group (413 children altogether) had reached Book IV (Grade 2, i) or beyond in the basal reader series by the end of the first year, compared

with only 4% of the group using the conventional alphabet (687 children). After 18 months the proportions were 57% of the i.t.a. pupils in contrast to 13% of the group using the conventional print.

All the progress records kept and all the objective tests made so far in this research have pointed in the same direction; children using the traditional alphabet appear to be seriously retarded in reading and writing when their attainments (though quite normal by conventional standards) are compared with what is achieved by pupils using the simplified alphabet and spelling of i.t.a. On tests of comprehension, word recognition and speed of reading the children learning to read with i.t.a. demonstrate an astonishing superiority.

This testing indicates that the conventional alphabet and spelling system has two major defects when it is used in the beginning stages of learning to read and write:

(a) Young pupils are given too heavy a load of learning at the very beginning.

(b) This code for spoken English is too complex and irregular.

(a) Too heavy a load for beginners.

Traditionally printed English overloads the beginner in three ways.

(i) Too many characters.

To read conventionally printed books the child has to learn two or more different characters for each letter of the alphabet—B as well as b, G and g as well as g, etc. Contrast this with the situation of the pupil using i.t.a. materials. He has one single printed form for each letter of the alphabet. Where capitals are needed i.t.a. does not use a different shape. Instead a larger version of the same lower case shape is used.

(ii) Too many whole-word representations.

The use of a variety of forms of letters in the conventional alphabet brings a variety of different patterns for each whole word of the language. Study for instance, the different ways of printing the word *dog* in Figure 2.

Conventional print	*i.t.a.*
1. dog	dog
2. dog	
3. Dog	
4. Dog	
5. DOG	

Figure 2

For *dog* the i.t.a. pupil has to learn one visual pattern only instead of the five or more different sets of characters in conventional print. There are generally at least three different common visual patterns for each whole word in conventionally printed English. In i.t.a. there is never more than one way of printing the same word.

The author is Reading Research Officer of the University of London's Institute of Education. Figure 1 is reprinted, by permission, from TW BEE OR NOT TO BE (Cassell).

(iii) Too many phonic print-signals.

In our traditional alphabet and spelling there is an enormous variety of ways of signalling in print the restricted number of basic sound units of English. Take for example the sound common to such words as *zoo, shoe, grew, through, do, blue,* etc. As Figure 3 shows, there are 17 ways of signalling this sound in conventional print, and this total must be increased to 28 if we consider the differences between upper and lower case versions of some of the letters. Figure 3 also shows how these 17 or even 28 different printed symbols can be reduced to one single symbol for the single sound when i.t.a. is used.

Conventional print		*i.t.a.*
1. u	ruby	ɷ rɷby
2. u.e	rule	rɷl
3. o	do	dɷ
4. o.e	move	mɷv
5. ui	fruit	frɷt
6. ui.e	bruise	brɷz
7. ou	group	grɷp
8. ough	through	thrɷ
9. oo	moon	mɷn
10. ooe	wooed	wɷd
11. oo.e	loose	lɷs
12. heu	rheumatism	rɷmatism
13. ue	flue	flɷ
14. eu	maneuver	manɷver
15. ew	grew	grɷ
16. oe	canoe	canɷ
17. wo	two	tɷ
18. U.E	RULE	rɷl
19. O.E	MOVE	mɷv
20. UI.E	BRUISE	brɷz
21. OUGH	THROUGH	thrɷ
22. OOE	WOOED	wɷd
23. OO.E	LOOSE	lɷs
24. HEU	RHEUMATISM	rɷmatism
25. UE	FLUE	flɷ
26. EU	MANEUVER	manɷver
27. EW	GREW	grɷ
28. OE	CANOE	canɷ

Figure 3

Thus the child using conventionally printed materials for beginning reading is weighed down by a heavy burden of redundancies, too many unnecessary characters, too many unnecessary whole-word visual patterns, too many unnecessary print-signals in phonics. In i.t.a. the load is greatly lightened, for he has only one form to learn for each letter, only one visual

pattern for each whole word and sentence, and in most cases only one letter to learn for each of the 40 odd basic sound units of English.

(*b*) *The conventional alphabet and spelling code is too complex and irregular for beginners.*

Two recent research reviews have stressed the significance of auditory perception in beginning reading. Durrell in looking back over the series of careful studies done by the Boston school concludes:

"If there are defects in the perception of the separate elements in the spoken word, there is little possibility of developing either good reading or spelling, regardless of the method chosen."

Elkonin's conclusions from his studies of Russian children's first steps in reading is that:

"To learn to read the child must be able to hear and distinguish the separate sounds of words."

These American and Russian investigators have reached the same conclusion because their respective languages have one important characteristic in common. Both English and Russian use an alphabetic code. The languages are different; the codes are different; but the principle is the same. The basic sound units—*phonemes* as the linguists call them—are symbolized in print by letters of an alphabet.

Durrell's and Elkonin's findings indicate that for physically normal children the first step toward success in reading alphabetic languages such as English and Russian is the development in the child's concepts of these sounds. The young pupil is not ready for reading until he has learned to perceive and isolate consciously these sound units within words. Then the child may learn the printed symbols which are used to signal visually the various sound units of the spoken language.

Unfortunately for the *English speaking* child, his traditional printed code is extraordinarily complex and inconsistent. English as printed conventionally has three special difficulties for the young child trying to break the code.

(i) Inconsistent spelling

In our traditional alphabet and spelling, letters cannot be relied upon to keep the same sound value. See, for example, how the letter o is used to represent several different sounds in Figure 4.

Conventional print	*i.t.a.*
do	dœ
go	gœ
women	wimen
gone	gon
one	wun

Figure 4

In contrast, i.t.a. is much more consistent as a code for spoken English. Each of the different sounds in the words of Figure 4 is signalled by a different printed symbol, as the young code-breaker would anticipate. He therefore finds that he can rely on the code, and is not led to doubt his logical approach to such problems.

(ii) Inconsistency of direction

An essential element in a printed code is the way in which sequence is indicated. In traditionally printed English we read words from left to right, but within many words the letters are not to be read from left to right in the early primitive decoding stage of learning. The examples in Figure 5 illustrate this clearly. In all these words, the first sound is signalled by the first letter on the left, but the second sound is signalled by letters two and four and the child must *reverse* from right to left to read the final sound signalled by letter number three.

In i.t.a. the left to right rule of reading is never broken.

Conventional print	*i.t.a.*
cape	cæp
dive	diev
home	hœm
tune	tuen

Figure 5

(iii) Complexity of phonic symbols

The traditional alphabet does not have enough letters to provide one letter for each of the 40 odd sound units of English; instead letters have to be used over again in a variety of combinations. See, for example, how the letters c, h and t are used in the representation of a variety of sounds in the words in Figure 6.

Conventional print	*i.t.a.*
cat	cat
hat	hat
chat	ċhat
which	whiċh
thigh	ṫhie
thy	ṫhie

Figure 6

To the child making the simplest most straightforward approach to breaking the conventional printed code for English these letters appear to be ambiguous and the solution to the problem of decoding such words as these is a highly complex one for a young child. In i.t.a. this complexity has been drastically reduced, because most of these sounds have been supplied with their own special characters, each of which can now be learned as an individual letter standing for its own particular sound.

This attempt to make i.t.a. a more reliable code for young beginners has produced dramatic results in our research. The pupils learning to read and write with

TW BEE OR NOT TO BE - a Review

Every school system wishes to improve its teaching of reading. The improvement will come about, of course, by changes in the work of the classroom. The teacher will make those changes, first, when she sees the problems, and second, when she finds specific methods of solving those problems. Mr. Downing, in his book on *The Initial Teaching Alphabet*, has pointed out a major problem and has made a strong case for a solution.

The problem is that the instruction provided in word identification is not of sufficient quality to enable most pupils to acquire independence in attacking strange words successfully. The solution lies in the use of the "new" alphabet.

In spite of the usual "Hawthorne Effect," the results have been very impressive with experimental groups of four and five year old English children. Perhaps Canadian six year olds would not experience the same need for alphabet simplification but certainly it offers much promise in the remedial area. Incidentally, nearly all Canadian and American research points to the age of six to six and one-half years as the desirable age for beginning reading. Physically, mentally, emotionally and socially a child must have attained that age before he can be expected to do well in the beginning reading program.

Mr. Downing does not mention the difficulty of obtaining sufficient quantities of reading material set in the i.t.a. In every Grade 1 classroom there should be a large collection of books at many levels of difficulty and it is too much to expect that publishers would all change to a new system of printing. Also, the vast amount of excellent material—diagnostic, remedial, enrichment, etc.—in our schools would have to be discarded.

In spite of these difficulties, the book is stimulating because it offers a teaching aid for the subject that is the most important and the most difficult to teach. Grade 1 teachers would do well to try the method themselves. Whether this will become another trend in our multiple-learning approach in primary reading or not—*that is the kwestion*

T. S. Julian, Past President, Lower Mainland Branch, International Reading Association.

i.t.a. have demonstrated great superiority in word-building. For instance, on the Schonell graded word reading test at the end of the first year 25% of i.t.a. learners could read 30 words (third year level of performance) or more on the i.t.a. version of the test, whereas only 2% of pupils using conventional print could read that number of words on the same test in conventional print. At the end of 1-1/3 years of schooling the proportions scoring 30 or more on this test were 56% of the i.t.a. group and 6% of the pupils learning conventional print.

This superiority of the i.t.a. pupils is not confined to phonic word-building. They are also very far advanced in comprehension, accuracy in sentence reading, and speed of reading. Their creative writing, too, seems to be superior in both quality and quantity.

The evidence from our research indicates that we need a new alphabet for beginning reading. When the results of teaching with the traditional alphabet are compared with those obtained through i.t.a., we see how the conventional alphabet and spelling frustrate our children's attempts to learn the skills of reading and writing.

One can only guess at the inhibiting effect that the use of the conventional alphabet and spelling for beginning reading have on the development of the elementary school curriculum and on the permanent attitudes toward learning and problem-solving which may be produced in individuals who are less well equipped intellectually to cope with such over-loading, and in those who are less able to tolerate the uncertainty of such inconsistency.

Children can Transfer their Reading Skill from i.t.a. to Standard Print.

In the British schools using i.t.a. for beginning reading each child makes the transfer to reading traditional print when he individually is ready for this step. Most children in Britain begin school at five (some at four or even younger). In our experiments a very few children have been transferred from i.t.a. to standard print after only two or three months, but most appear to reach the necessary level of fluency in i.t.a. during the second year of schooling.

Fluency in reading i.t.a. is essential before transfer is attempted, because Sir James Pitman's design is based on this principle. He has preserved in i.t.a. those cues, generally situated in the top part of the line of print, which we use in fluent reading of the conventionally printed page. That is why the passage shown in Figure 1 appears to be so similar to standard print and why it is so easy for the adult reader to read i.t.a. A minority of words do change more drastically in appearance but children can guess these from context. A high level of fluency in i.t.a. is required before transfer, because only then will the pupil have developed the necessary skills of using minimal cues and contextual clues which will ensure

a smooth transfer.

Our research has not yet advanced very far into the period after transfer but already tests have been made of the i.t.a. pupils' ability to read conventional print. Eighteen months after beginning to learn to read with i.t.a. they achieved very superior scores on tests *printed in the traditional alphabet and spelling*. The children who begin with i.t.a. and later transfer to the standard print can read the latter with much greater accuracy and comprehension than children who have been learning the traditional alphabet and spelling from the beginning.

On the writing side the transfer needs to be more gradual, but teaching conventional spelling against the background of the earlier experience of the relationship between i.t.a. writing and speech appears to be producing good results in spelling, too. Judgment on this question must be postponed, however, until these children reach the age when spelling standards are generally better established.

Why the Use of i.t.a. is Spreading.

In the British Isles the use of i.t.a. has spread from 20 schools in 1961 to some 200 schools in 1963. In the United States i.t.a. has been introduced in many public and private schools. In Pennsylvania over a thousand children in 17 school districts have recently started to learn to read with i.t.a. in a project led by Dr. Albert Mazurkiewicz of Lehigh University and aided by a grant of $148,000 from the Ford Foundation. In Ohio a pilot study with 250 pupils has been initiated by the Educational Research Council of Greater Cleveland. Several other i.t.a. projects have begun or are planned to start in 1964 in other areas of the United States and in Canada.

i.t.a. is also being used for recovering children from reading failure and its effects. Our first experiments in using i.t.a. to help children who had failed on the conventional alphabet and spelling took place in 1961. Children with I.Q's of 80 or lower learned i.t.a. and were successfully transferred to standard print, and there appears to have been no regression since remedial teaching was withdrawn.* This recovery work with i.t.a. has now been extended to over 60 other centers and experiments are in progress with pupils of varying ages and in a variety of educational situations.

Why is the use of i.t.a. spreading so rapidly? One reason is that the first empirical studies of its effectiveness have shown how i.t.a. can produce exceptionally high attainments in reading, and these results have been widely reported.

The importance of reading as a tool of study has increased as human knowledge has expanded and been stored in books. It is essential that we find better ways of ensuring that this route to independent study is open to as many students as possible.

A less obvious but perhaps even greater force which is attracting the attention of educators to i.t.a.'s potential is the general concern to reform the curriculum to meet the needs of our children of the 1960's. The world in which our young children will grow up will be subject to rapid and drastic changes, and they will have to be ready constantly to test new alternatives for themselves and to deduce likely outcomes on a rational basis. i.t.a. may have an important part to play in that early training in empiricism and reasoning, for when a pupil learns to read with i.t.a. his natural, straightforward, rational approach to learning and problem-solving is rewarded and reinforced, and he is soon able to succeed in his own independent experiments in decoding print and in creating words and sentences with pencil and paper.★

*For complete report on this experiment and others see Chapter 9 of *The Initial Teaching Alphabet Explained and Illustrated*, John Downing, Cassell, London, 1963.

Canada's Experiment a Warning?

Canada's "experiment" in public aid to non-public schools should serve as a warning to U.S. policymakers considering similar experiments, according to findings reported in an unpublished doctoral dissertation completed last year at the University of Chicago.

Summarizing his research in the May issue of the *Administrator's Notebook*, author John E. Cheal, a staff associate at the Midwest Administrative Center, University of Chicago, said: "There is no evidence that the granting of public aid to denominational school systems (in Canada) has increased public investment in education. Lower teacher salaries and qualifications are generally associated with the degree of denominationalism. Educational output, in terms of the holding power of the schools and, in the case of one province, academic achievement, is usually higher in those provincial school systems having fewer denominational characteristics. These data suggest that the present practice in the United States of using public funds only for public schools ensures the greatest return to investment in education. Any departure from this policy may lead to a lessening of public support, an inefficient use of scarce resources, and a lowering of educational output."

—*Phi Delta Kappan*

Educational Inequalities —Canada's Major Problem

In this brief, recently presented to the Government of Canada, CTF points out a condition that the Vancouver Sun *describes as "a more serious threat to national unity than the gyrations of a handful of Quebec separatists."*

THE CANADIAN Teachers' Federation wishes to thank you for receiving this delegation which speaks on behalf of 135,000 teachers in all ten provinces. We appreciate this opportunity of bringing before you a matter which we believe warrants the study of those in whose hands our people have placed the responsibility for affairs of national scope and significance.

It is our purpose to document this fact: that the quality of education available to Canadians depends on where they live.

We intend to state our conviction that this is not merely a provincial problem, but a national one. It is not one that might quietly fade with the passage of time, but one that is increasing in urgency. Nor is it merely an emotional argument. It is one that is logical, and based on the knowledge that education has a direct relationship to a nation's economic growth.

The Problem

In one sentence, the problem is this: there is a severe imbalance in educational opportunities in Canada.

The two main factors which determine the level of opportunity are not the ability and willingness of students to work diligently, but rather the general wealth of the province and the relative importance placed on education by the people in that province. The second factor—the value placed on education by a province—the Federal Government cannot rightfully affect. The first—provincial wealth—is appropriate to bring to your attention, since it affects the ability of a province to provide funds to discharge its constitutional responsibilities towards education, since it affects the economic well-being of a nation as a whole and since it has its roots outside the field of education.

The Urgency

This 1963 submission of the Canadian Teachers' Federation is directed by our sense of urgency which prompts us to seek a solution to this problem. Our national and international leaders have again and again testified to the strategic importance of education as a basic tool in the economic and social development of all countries of the world, including our own.

Canada has long since reached a state of national emergency in education. Educational costs are expected to double in the next decade. The post-war boom in enrollment has not levelled off: indeed the ratio of young children to the rest of the population has been increasing rapidly. Even the practical matter of unemployment is affected more by the general level of education than by limited, short-term measures such as the Technical and Vocational Training Act. Measures in any one field can never be satisfactory if built upon an unstable base. Additional training or retraining for jobs requiring technical skills cannot be effective unless those being trained have an adequate basic education. *It is at this level—the provision of a generally high quality of basic education—that the problem continues in ever-increasing magnitude.*

Indicators of Inequality

One central indicator of the quality of educational programs is the amount of money spent yearly for each pupil. For the calendar year 1961, the per pupil

expenditure for elementary and secondary education varied between $141 and $378, the average for the ten provinces being $286.

Table 1. Per Pupil Expenditure on Public Elementary and Secondary Education by Province, 1961.

Alberta	$378
British Columbia	373
Saskatchewan	327
Ontario	307
Canada	286
Manitoba	284
Quebec	249
Nova Scotia	202
New Brunswick	191
Prince Edward Island	162
Newfoundland	141

Source: Dominion Bureau of Statistics, Education Division, *Preliminary Statistics of Education, 1961-62*. Ottawa: Queen's Printer, 1962.

Thus, in dollars, one province spends over two and one-half times as much per pupil as another. Even if we take into consideration variations in size and density of population, in cost of living, or in wages, these variations would likely reduce this differential by only one-fifth.

Per pupil expenditure correlates highly with other factors—especially teacher qualifications—which represent the quality of an educational program in a much more direct way. Few would deny that the teacher is the most important single influence during a child's formal education. Yet the proportion of teachers with university degrees—and this is the most reliable indicator of the level of the qualifications of the teaching force—varies from 37.4 percent in one province to only 7.7 percent in another. Thus, proportionately five times as many teachers in one province hold degrees as in another.

Table 2. Proportions of Elementary and Secondary Teachers with University Degrees by Province, 1961-62.

British Columbia	37.4%
Ontario	32.0
Alberta	29.6
9 Provinces	28.2
Nova Scotia	24.7
Manitoba	24.5
Saskatchewan	18.0
New Brunswick	14.5
Newfoundland	11.3
Prince Edward Island	7.7

Source: Dominion Bureau of Statistics, Education Division. *Salaries and Qualifications of Teachers in Public Elementary and Secondary Schools 1961-62*. Ottawa: Queen's Printer, 1962.

There are many other indicators of the uneven quality of educational programs across Canada. They include the variety of curricula (the number of subjects offered and the number of hours given to each subject), the adequacy of physical facilities, the extent of auxiliary courses (such as classes for the gifted or for the handicapped), the transportation essential to the increasing number of larger school districts being organized to improve rural education, the textbooks necessary today for even a basic education.

All these provisions vary widely, as thousands of Canadians who moved their children from one provincial system to another this year will testify, and these indicators of quality correlate positively with per pupil expenditure.

The Effects of Inequality

And yet, the most telling and direct evidence that inequalities do indeed exist is found in the proportion of students who stay in school. Most recent data indicate that in one province six out of ten children in a particular age group remain in school until they reach Junior Matriculation while the corresponding figure for several other provinces is less than three out of ten. In other words, children born in the province with the highest retention rate are twice as likely to reap the benefits of a high school education as children in several other provinces. Surely this destroys any illusion we might cherish about equality of educational opportunity in Canada!

Table 3. Estimated Retention Rates[1] at the Junior Matriculation Level, by Province.

Alberta	60
British Columbia	50
Saskatchewan	47
Manitoba	46
Nova Scotia	40
Ontario	34
Quebec (Protestant)	34
Newfoundland	29
New Brunswick	27
Prince Edward Island	22
Quebec (Catholic)	18

[1]Retention per 100 pupils beginning Grade 2 in 1946.
Source: Dominion Bureau of Statistics, Education Division. *Student Progress Through the Schools by Grade, 1960*. Ottawa: Queen's Printer, 1960.

Reasons for Inequality — Wealth and Effort

Wealth

Funds for educating the children of a province must be derived chiefly from the wealth of that province. Provincial wealth is difficult to measure with precision, but precision is not needed to produce evidence of disparities, so large are the differences. The best available indicator of a province's wealth, and consequently, of its ability to support education, is personal income per capita. In 1961 the average personal

income per capita for all ten provinces was $1,535, but the provincial averages ranged from $904 to $1,829. In other words, the average Canadian in some provinces had access to twice as much money as did Canadians in other provinces.

It is significant that the provinces with low personal incomes spend the least on public elementary and secondary education, have the lowest student retention rates and the lowest proportion of degree teachers. One can only conclude that those provinces which spend little for education do so mainly because they have little to spend.

Table 4. Personal Income Per Capita, by Province, 1961.

Ontario	$ 1,829
British Columbia	1,809
Alberta	1,582
10 Provinces	1,535
Manitoba	1,476
Quebec	1,332
Nova Scotia	1,191
Saskatchewan	1,184
New Brunswick	1,054
Prince Edward Island	952
Newfoundland	904

Source: Dominion Bureau of Statistics, National Accounts Division, *National Accounts, Income and Expenditure, 1961*. Ottawa: Queen's Printer, 1962.

Effort

A province's effort is not necessarily related to its wealth, that is, the amount it spends to support education. A useful indicator of this effort is the proportion of personal income spent on schooling. Look at Table 5 below. The national average shows that 4.2 cents out of every per capita dollar earned goes toward education, yet across the country, this varies from 3.9 cents to 6.3 cents. Some of the provinces where per pupil expenditures are low (Table 1) exert a relatively larger effort than some of the provinces having more than double the per pupil expenditure. Conversely, the province with the highest per capita income maintains a high standard of education with the least financial effort of any of the provinces.

Table 5. Total School Board Expenditures for Education[1] as a Percentage of Personal Income, by Province, 1961.

Saskatchewan	6.3
Alberta	5.4
New Brunswick	4.6
Newfoundland	4.5
British Columbia	4.2
10 Provinces	4.2
Nova Scotia	4.2
Prince Edward Island	4.1
Manitoba	4.0
Quebec	4.0
Ontario	3.9

[1]Total expenditure from current revenue.
Source: Dominion Bureau of Statistics, *Preliminary Statistics of Education, 1961-62, National Accounts, Income and Expenditure, 1961*.

The inequalities in Canadian education may be illustrated in two ways. First, we may ask what standards of education would result if all provinces expended the same effort on education. The answer to this question is related to personal wealth which varies widely between provinces. Therefore, even if each province spent the same proportion of its wealth on education, there would still be wide differences between the amounts of money available for education from province to province.

Another way of examining the disparities in Canadian standards of education is to ask how much effort each province would have to expend to maintain the Canadian average in education. A method developed by Eric J. Hanson for the Canadian Tax Foundation can be used to answer this question. Hanson showed that for every province to have provided merely the *average* Canadian standard of education in 1956, it would have cost the taxpayers in British Columbia and Ontario least (3.2 cents and 3.3 cents respectively per dollar of personal income) and those in New Brunswick and Newfoundland most (6.4 cents and 9.1 cents respectively). The same level of education would have required at least twice as much financial effort in some of our provinces as it did in others. Although personal incomes may have changed since these data were available, the pattern of disparity remains much the same. The data show that some of our provinces appear to be incapable of financing a satisfactory level of education for the children in their classrooms.

Table 6. Percentage of Personal Income Required to Provide Average Canadian Standard* of Education in 1956.*

Newfoundland	9.1
Prince Edward Island	6.0
Nova Scotia	5.4
New Brunswick	6.4
Quebec	3.9
Ontario	3.3
Manitoba	3.9
Saskatchewan	4.2
Alberta	4.5
British Columbia	3.2
Total	3.8

*Hanson, Eric J. *Fiscal Needs of the Canadian Provinces*. Toronto: Canadian Tax Foundation, 1961.

These Inequalities Do Matter

Current thinking by economists on the relationship between education and economic growth indicates that there is a close interdependence between educational and economic disparities.

Education has traditionally been regarded as a consumption item—one on which society spends current income to gain personal satisfaction for individuals. The possibility that education might, as well, be a factor of production vitally important to the growth of the economy has in the past been largely ignored.

Recently, however, there has been a growing awareness that the advanced technological development which sustains and causes our economy to expand is dependent upon a high level of training in our labor force. Whereas the Industrial Revolution was created largely through individual genius, contributed on a somewhat erratic basis, today's Scientific Revolution depends not only on isolated genius, but more importantly, on the planned, co-operative efforts of large numbers of highly trained personnel. In addition, the educational experiments in Russia have successfully demonstrated a relationship between economic progress and the development of human talents.

As a consequence of the growing awareness of this hitherto neglected relationship, coupled with the inability to explain economic growth in terms of increasing man-hours and physical capital alone, education has come to be regarded as an investment on which the future productivity of the economy depends. In other words, education has been elevated in the eyes of many economists to the level of an investment in human capital, rather than current consumption.

Investment in education has a unique importance to any nation because the effect of under-investment in this field can never be fully recovered or made up. When primary education is neglected, the consequences will be felt throughout the lives of the people adversely affected.

Unlike most forms of non-human capital, education has a relatively long productive life. A good basic education serves the individual the rest of his life and serves the economy for approximately forty years —the period usually spent in productive work. Thus, because it is durable and adaptable, it can be said that a given investment in education adds more to the productive capacity of a country than an equal investment in non-human capital.

Some of the more ambitious attempts to measure the effects of education on economic growth using analytical techniques have been made by a group of economists in the United States. These men, in particular Theodore W. Shultz[1] and Edward F. Denison[2], have shown that education, far from being a consumption item, is instead a vital item of capital formation—one on which the future productivity of the economy depends.

Schultz worked out a relationship between increases in schooling and increases in real income which showed that between 36 and 70 percent of the increase in income in the United States between 1926 and 1957 was attributable to the increase in the educational level of the labor force. Denison went beyond the analysis of past growth to predict that over a fifty-year period, the effect of each additional year of schooling will be a net increase of 4.5 percent in output.

The conclusions of these economists are important in two ways, in our discussion of educational inequalities. First, they point out the necessity of increasing the level of educational attainment. Second, they suggest that financial aid to education need provide only temporary, rather than perpetual, assistance, to economically-depressed areas. The reason for this conclusion is that investment in education brings a high return in the form of accelerated economic growth, a return not equalled by other forms of economic stimulation that have been tried, such as subsidies to specific resource industries and increases in the supply of physical capital or means of production. Thus, it is conceivable that the economic growth occasioned by improved educational attainment could, within several generations, obviate the necessity for continuing grants.

The unprecedented growth in Canada's Gross National Product since the last world war is attributable to many factors. Yet, one major factor usually overlooked has been the upgrading of the skills of our labor force through our *investment* in education.

The Canadian government has tried to stimulate the economy of certain sections of our country through the use of grants and subsidies to specific industries. We believe that economic growth in relatively poor areas of our country could be more effectively stimulated by equalization grants or other fiscal arrangements aimed at upgrading the level of their education. Investment in human capital, designed to foster economic growth, is perhaps the most promising strategy in any long-range attempt to reduce our gross inequalities in prosperity—and education.

A National Problem

Canada is a confederation of ten provinces, but it is also a nation. Therefore, it is appropriate that in matters of broader scope we should act as Canadians and not only as citizens of any one province. Surely *every* Canadian boy and girl has a *right* to an equally high level of educational opportunity.

We realize that the making of laws in relation to education is the exclusive right of the provincial government, and the Canadian Teachers' Federation would not have it otherwise. We recognize the variety of Canadian education stemming from this right and we are not opposed to this variety so long as the differences are in kind and not in worth.

Because we believe that the inequalities which exist are due primarily to a variation in the degree to which the provinces are financially capable of discharging responsibilities assigned to them under Section 93 of the BNA Act; and because the resultant dilemma faced by some provincial authorities has its

real roots in the unequal distribution of economic resources among the provinces—a field which is properly the concern of the Federal Government—we, therefore, respectfully suggest that the Federal Government not only may, but *must*, display initiative in coming to grips with this problem.

What Can Be Done

While we do not believe that the Federal Government should in any way assume control of education, the Canadian Teachers' Federation recommends:

THAT the Federal Government take the initiative in calling a widely-representative meeting of provincial ministers of education, their advisors, and those national bodies most vitally concerned, to consider the feasibility of co-operation in searching for a means of alleviating the inequalities which now exist.

We further request:

THAT, at the Federal-Provincial Conference which is to be held the week of November 25, the Federal Government seek agreement for such a meeting.

The Canadian Teachers' Federation and its provincial affiliates are prepared to co-operate by offering the findings of our many years of intensive study and by applying our professional knowledge to the task of seeking a solution. We are convinced that the complexity of the problem makes less than satisfactory anything short of an all-out, co-operative investigation, and that this study should be launched, in the national interest, as soon as practical.★

References

[1]Schultz, Theodore W. "Education and Economic Growth." Sixtieth Yearbook of the National Society for the Study of Education, Part II (*Social Forces Influencing American Education*). Chicago: University of Chicago Press, 1961, p. 46-88.

[2]Denison, Edward F. *The Sources of Economic Growth in the United States and the Alternatives Before Us*. Supplementary Paper No. 13 published by Committee for Economic Development, January, 1962.

Next in importance to freedom and justice is popular education, without which neither freedom nor justice can be permanently maintained. James A. Garfield

When Was the First Christmas?

THREE MEN SAIL their camels over a sea of sand. A dazzling star hangs above a town huddled in sleep. On the hillsides, sheep stir and the fires of shepherds twinkle. A single light burns in the town.

No second guesses are needed to identify this word-picture as the First Christmas. Yet when was it, exactly?

Saint Matthew tells us Jesus was born when Herod was King of Judea. Scholars have established that Herod reigned from 37 B.C. until his death in 4 B.C. Matthew also relates the story of Herod's plan to kill the Infant King and remove any threat to the pagan throne. Each year the story is repeated in Sunday Schools throughout the Christian world: how Herod sent the Three Wise Men in search of the Child . . . how the Wise Men were warned in a dream that Herod was up to no good . . . how Mary and Joseph received a similar warning and fled to Egypt with their Child . . . how Herod tried desperately to eliminate Jesus by ordering the slaughter of all male children in and around Bethlehem.

In the words of Saint Matthew, Herod called for the death of all boys "from two years old and under, according to the time which he had diligently inquired of the Wise Men."

According to this passage, the Wise Men told Herod they had first seen the Star of Bethlehem two years before the tyrant had ordered the "slaughter of the innocents." Since we know Herod died in 4 B.C., Jesus must have been born at least two years earlier.

We say Jesus was born B.C.—Before the Christian Era—because of calendar changes in the sixth century.

Many scholars believe they can get a better idea of the time of Nativity by learning more about the Star of Bethlehem and the Wise Men.

Today we know that fundamental mathematical laws govern the motion of the planets. Astronomers are able to predict the appearance of comets, stars and eclipses by applying complicated mathematical time formulas. Scientists note that one of the most interesting speculations on the origin of the Star of Bethlehem was in 1937 by the Rev. W. Burke-Gaffney, S. J.

Writing in the Journal of the Royal Astronomical Society of Canada, Father Burke-Gaffney suggests the Star might have been a nova. Novae are stars which flare up suddenly and then fade after a few months. Astronomers believe this is caused by tremendous explosions, similar to the ones which occur on our own sun, itself a small star.

Astronomy was a budding "science" long before Christ. Its center was in Babylonia, which is thought to have been the home of the Wise Men. They were known as "magi," the old Babylonian word for the scholarly, star-gazing priests of the Zoroastrian religion. Since comets, eclipses and the positions of the planets signified great changes in the affairs of men, there is little doubt a blazing star would not have gone unheeded.

The Wise Men were guided by a mysterious star.

—Photo courtesy of Hamilton Watch Co.

The great German astronomer Johann Kepler, who died in 1630, suggested that Christ had been born in 7 B.C., during a conjunction of the planets Mars, Jupiter and Saturn. This phenomenon would have certainly interested the Magi. By calculating the unchanging journeys of these three planets, however, it has been learned that Mars, Jupiter and Saturn could not have been bright enough to be visible in 7 B.C. Seven B.C., however, is still regarded by many to have been the year of the Birth. Why?

According to the Bible, Christ was born during one of the great census takings of the Roman Empire. In addition, Rome's history records that an empire-wide taxation was begun in 8 B.C. It is not unlikely the census and taxing were held at the same time since one could have served as a check on the other.

Since Judea was on the frontier of the Roman Empire, it must have taken the tax and census takers about two years to work their way there. From Saint Matthew's account we know Jesus was at least two years old at the time of Herod's death in 4 B.C. Allowing a year and a half or two years for the Roman officials to reach Bethlehem, and subtracting at least two years from 4 B.C., we can narrow the Nativity to 7 or 6 B.C. At this point even the experts differ.

As for the time of year of the Birth, many believe we need not look further than the Bible itself. Saint Luke says in his description of the Holy Night, "And there were in the same country shepherds abiding in the field, keeping watch over their flock by night."

Since earliest days, it is only in the spring—when lambs are born—that the shepherds watch their flocks at night. December is the rainy season in the Holy Land, and shepherds are not likely to be out.

If Jesus was born in the spring, why do the major Christian religions celebrate His birth in winter? Centuries before Christ, the last week of December had been a time of pagan festivals. It is the time of the winter solstice—when the sun stands farthest south in the sky. According to the old Julian Calendar, the solstice occurred on December 25. Our calendar—the Gregorian—marks it as December 22.

The boisterous Kalends celebrations of the Romans were held at this time. Since the early Christians were outlaws in Rome and forbidden to worship, they used the Kalends as a disguise for their own solemn rites. The Kalends customs of gift giving and decorating doorways with evergreens were incorporated by the Christians—and Christmas, as we know it, was born.★

Responsibility for Auto Insurance — School Board's or Teachers'?

J. C. M. SCOTT

IS THE SCHOOL BOARD responsible for arranging appropriate coverage when teachers/employees transport students on occasion in their private cars in the normal course of employment?

Certainly, the position of school boards, as opposed to individual teachers/employees is frequently the subject of considerable confusion and misunderstanding. Basically, there are two individual legal interests involved: (1) the interest of the individual teacher/employee; and (2) the interest of the school board.

Interest of the Teacher/Employee

Under the Motor Vehicle Act the registered owner of a motor vehicle is personally responsible for any damages to the persons or property of others which may be caused by, or arise out of, its ownership, use or operation. Under the Insurance Act, the only form of policy which can be written to insure this statutory personal liability of the owner is the Standard Owner's Form of Automobile Liability Policy. This is the type of policy against which a Motor Vehicle Liability Insurance Card, or "pink slip," is issued.

There is therefore no legal way in which automobile liability coverage can be written for the owner of an automobile, regardless of for what purposes it may be used, other than under an Owner's Form of Automobile Liability Policy, written in the name of the individual registered owner.

This form of policy also includes Passenger Hazard Liability coverage and no additional charge is made for providing this coverage, as long as the owner does not carry passengers for compensation at any time. Passengers carried gratuitously in a private automobile must prove gross negligence to succeed in any action against the owner/operator should they be hurt in an accident while being so carried. However, if the owner/operator is being compensated for carrying the passengers, then they need only prove ordinary negligence in order to establish a successful claim.

One of the questions asked under the application for an Owner's Form of Automobile Policy is, "Will the automobile be used for carrying passengers for compensation or hire?" This question is usually answered "No," unless the owner intends to use it as a taxi, or some similar purpose. However, if notwithstanding having answered "No" to this question, passengers are carried for compensation on occasion, and the courts have held a share cost basis to be compensation in certain circumstances, it is always possible the owner's insurer might deny coverage if an accident occurred while passengers were being so carried. Whether or not the B.C. courts would uphold a denial by the insurer on such grounds would be problematical and entirely depend on the circumstances involved. To be on the safe side however, any teachers/employees who may use their personal cars to carry pupils at any time and who accept compensation for so doing, should discuss the situation with their insurance agent and obtain confirmation that the insurance company underwriting their personal automobile insurance is aware of the situation and has confirmed application of pertinent coverage. They should also obtain confirmation that any share cost arrangement, in the event some form of car pool is operated, would not be considered compensation within the meaning of the term insofar as it applies to an automobile insurance policy contract.

Where individual owner/operators do receive compensation for carrying pupils on occasion in their private cars, most companies are prepared to endorse the individual's automobile policy to give the necessary permission to carry such passengers for compensation or hire, provided they are only being so carried incidental to the owner/operator's normal employment. There is usually an extra $3.00 annual premium charge. The attachment of this permissive endorsement does not in any way affect the validity of their policy's ordinary passenger hazard coverage which

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Mr. Scott, of The Yorkshire Corporation Ltd., prepared this article for The B.C. School Trustee, *from which it is reprinted.*

will continue to protect them when carrying other persons at any time, as long as they do not pay in any way for the ride and as long as the owner/operator is not being remunerated by any other party, such as the school board, on a mileage basis or otherwise, for providing such transportation.

The Interest of the School Board

In the event of any teacher or other school board employee being involved in an accident while driving his or her car on school board business, primary liability would lie against the owner/operator and their personal automobile policy would pay for any third party liability loss, up to the limits of their policy.

Under the Master and Servant Act, however, the master may be held liable for the torts of the servant. Therefore, if the injured third party could not, for any of a number of reasons, effect full recovery from the owner/operator, it is always possible judgment could be obtained against the school board. While such a possible liability of the school board is more contingent than direct, it is nevertheless a real exposure to potential loss.

Insurance against this risk should accordingly always be carried by school boards, under a Non-Owned Automobile Policy, written in the name of the board. Such a policy is frequently issued as an endorsement attached to a school board's Comprehensive Liability Policy. This policy however, is a NON-OWNED coverage, and does NOT protect the individual owner/operator of any automobile being used on school district business. The third party liability coverage afforded under a Non-Owned Automobile Policy makes no distinction between passengers and other third parties. Therefore it also insures the board against the possibility of any passenger injured in a private automobile while being operated on school board business attempting to recover from the board, as the employer of the owner/operator.

As a matter of principle, where a board knows teachers or other employees regularly use their private cars to carry pupils in connection with bona fide school activities, the board should make sure they carry adequate third party liability limits of coverage under their personal automobile liability insurance policies. Furthermore, if any form of compensation, on a mileage basis or otherwise, is received by the teachers or other employees concerned, particularly if such is paid by the board, a certified copy of their auto policy should be filed with the board and carry an endorsement specifically agreeing to such use of the vehicle.

While it is unlikely many teachers operate their private cars without carrying at least the minimum limits of third party liability coverage necessary to give them a "pink slip," it is not actually a legal necessity for a teacher or any other owner of a private car to carry third party automobile liability insurance.

Most teachers, as responsible individuals, probably carry limits considerably higher than the $35,000.00 statutory minimum and those who don't, or those who don't carry any third party liability coverage at all, are taking exactly the same chance of personal financial loss when carrying friends or other gratuitous passengers in their private cars as when they may carry students. As teachers are not required to carry students in their cars at any time, any more than they are required to give friends a ride, the matter of what limits of liability coverage they carry under their own auto policies is really a matter for their own personal decision.

However, from the viewpoint of the school board, it would be in the interest of all concerned for the board to instruct all teachers, as well as all other employees, that they must not carry students in their private cars while operating these in connection with any school activity unless they carry third party liability insurance coverage for limits of not less than, say, $100,000.00 inclusive, under their personal Owner's Form of Automobile Policy. Furthermore they should not accept compensation of any type if they do carry students at any time in connection with school activities, unless their policies are specifically endorsed to grant permission to accept compensation under such circumstances.

General Remarks

For one reason or another some school boards seem to feel they should accept responsibility in the event of an accident occurring while a teacher or other employee is using his or her car on school board business. As pointed out earlier, however, it is simply not legally possible for school boards to purchase insurance coverage on behalf of their teacher/employees.

This can be provided only under the statutory Owner's Form of Automobile Policy, written in the name of the individual owner.

Moreover, this is where liability should lie, as final responsibility for the safe operation of any automobile must necessarily rest solely with its owner/driver.

As it is not normally a prerequisite to employment for a teacher to own an automobile, or, for that matter, if the teacher does own an automobile, for it to be required to be used either to carry pupils or on other board business, gratuitously or otherwise, a board should not accept responsibility for providing insurance in the individual owner/employee's interest. If any teachers or other employees do use their cars, with the approval of the board, for purposes incidental to any school board activities and are remunerated for so doing, then a portion of that remuneration should be considered as applicable to the cost of their personal automobile insurance, which in turn is merely a part of the overall cost of running a car.★

Industrial Education, not Industrial Arts

EUGENE TURNEY

OUR GENERAL PROGRAM has been less valuable for boys than it has been for girls. The commerce and home economics courses that are offered have a purpose; they relate closely to real-life, either in the home or in the office. Girls in our General Program know where they are going from Grade 10 onwards. This cannot be said of the majority of our boys. They have been given narrow industrial experiences, and if vocational guidance was given it was usually toward a trade. Only a small percentage have the interest or ability to become good tradesmen; what, then, are we doing for the rest?

Our secondary schools are ignoring progress if their emphasis is on trades alone; what our students need is an understanding of industry and a realization of their place in it. When a General Program student graduates and knows where he is going, then we, as teachers, principals and parents, have done a good job. The student can go on to specialized trades training in vocational schools or to a company offering on-the-job training. His chances of success will be greater if he has selected his field of interest and has tested his capabilities in that field. Industrial education can provide this preparation and our students need this program now.

It should be recognized that industrial education, if defined fully, is different from industrial arts. Industrial education relates to the whole of industry: products, organization, operations, production and labor relations. Industrial arts deals, for the most part, with skills and operations. Since the whole of industry is studied in industrial education, one would expect the emphasis to be placed on modern industrial practices. No new directions have been issued in this regard; the new program we are offering is still, in fact, industrial arts.

The reason for changing the name of the program has not been made clear by the Department of Education. The fact that three new shop courses have been added does not necessitate a change in name. These courses—power mechanics, graphic arts, and electronics—simply increase the variety of trade subjects offered, and with the exception of a few prosperous schools, even these courses will not be offered. Hence there will be little effective change in curriculum; metalwork, woodwork and drafting remain, and they will be taught in the same manner as before. My criticism here is that industrial education is not an appropriate name for the courses we are offering. We should either revive the name industrial arts or offer a program that is truly industrial education.

A true industrial education program is the only alternative if we are to keep pace with industrial development and give purpose to our program. Fortunately, our course outlines are flexible enough that schools can carry out an authentic industrial education program and still complete the present course requirements. In fact, industrial education, as I have defined it, goes far beyond the courses prescribed by the Department of Education. The first industrial education program will set the future value of such programs on our educational market. Unless we provide this year a real industrial education program of value to all students, our General Program will carry on in its less than mediocre role—a program without a goal.

Continued on page 133

A Scholars' Retreat

An Experiment in Informal Information

THE PROGRAM

Theme: The Individual's Struggle to Relate Himself to a Changing Society

I. FRIDAY EVENING

Subject— A Political Ethic for Citizens of a Small Country in an Atomic Age
(Canada's role in an age of "big powers"; foreign and nuclear policies; parties and the party system; the voice of the individual)

Reading— Minnific, *Peace Maker or Powder Monkey*
Hailey, *High Places* or McLennan, *Two Solitudes*

Debate— (Professors and students) "Resolved that Canada's future role will be that of an American satellite."

—Questions, discussion; dance and entertainment.

II. SATURDAY MORNING

Subject— The Problems of Society in the next Forty Years: Survival? On what terms?
(Problems of population; depletion of natural resources; pollution of the earth by pesticides and fallout; war, anxiety and power control.)

Reading— Brown, *The Challenge of Man's Future*
Carson, *Silent Spring*
Shute, *On the Beach*, or Huxley, *Brave New World*, or Orwell, *1984*

Lecture— Dr. D. Livesay

—Questions, small-group discussion; free time for hiking, baseball, etc.

III. SATURDAY AFTERNOON

Subject— Establishing a Personal Morality in a Society with Changing Standards
(Ethics beyond supervision; conformity; conflicting codes of ethics; belief or philosophy, religion and science; sex, love and marriage.)

Reading— Russell, *Marriage and Morals*
The Organization Man, *The Status Seekers* or *The Lonely Crowd*
Fearing, "Dirge"; Anders, "The Unknown Citizen"

Lecture— Professor J. de Bruyn

—Questions, small-group discussion, dinner and spontaneous talks, free evening with bonfire and dancing.

IV. SUNDAY MORNING

Subject— Contemporary Literature and the Struggle for Identification

Reading— (one group)—*Lucky Jim, The Horse's Mouth; The Fountainhead, The Catcher in the Rye; The Plague, No Exit; Dr. Zhivago, Selected Poems of Evtushenko; High Places, Two Solitudes, The Loved and the Lost, The Luck of Ginger Coffee.*

—Discussion, lunch, evaluation and departure.

IT MAY SEEM pretentious for a group of high school teachers and students to entitle a weekend of discussion, dancing, lectures, swimming, reading and singing at Camp Elphinstone a "Scholars' Retreat," but the blatant aura academe was premeditated. The "Retreat," an experiment for everyone concerned, was an attempt by several staff members of West Vancouver Secondary School to encourage their more academic students to become aware of and discuss serious, significant problems, and to identify themselves with scholarship. Whether or not these aims were achieved with any degree of permanence may never be known, but there is no doubt that both the students and teachers involved found the experience surprisingly rewarding.

The conditions under which the venture operated gave it every opportunity for success. The two allotted days in May were clear and swimming-warm. The ferry trip to Langdale and two mile hike through the woods to Camp Elphinstone created a remote and cloistered atmosphere. The beach, bay and mountain settings were magnificent; the silence, unblemished by a single transistored "Twist-a-baby-twistl" made reflection possible.

More important, the students in attendance were selected by the staff for proven academic proficiency, interest and skill in discussion, and for reliability of behavior.

A Scholar's Retreat

M. GIBBONS

This undoubtedly eliminated some stimulating conversationalists but also eliminated many of the restraining influences on both students and teachers. Those chosen were then given invitations which explained that preliminary reading would be required, that the Retreat would be basically lectures and discussions, and that this weekend of "extra classes" would cost them eight dollars each. The fifty seniors (of sixty invited) who accepted under these conditions were obviously enthusiastic and prepared to gain from the experience. Also, the fact that the invitations had to be countersigned by one parent gave the group freedom from the usual restrictions of classroom formality, curriculum content and careful reading lists. The program committee, composed of six students and one adviser, was able to focus, without fear of censure, on topics of major interest to the group. The topics and required reading were mature and often controversial, dealing with politics, science and society, sex, philosophy and contemporary literature, and the significance of each of them for the individual.

All of these factors contributed to the success of the Retreat, but none more than guest speakers Professors Derek Livesay and Jan de Bruyn. Their presence gave prestige and a change from "the old familiar faces"; their lectures, which introduced the topics for discussion, set out the principal aspects of the problem and gave one clear point of view from which argument could begin.

In these ways good fortune, careful planning and co-operation between staff and students prepared the setting for the most important aspect of the program, group discussion. At this point, however, the staff and guests could only sit back and hope their approach had been adequate. Groups of seven to ten, each chaired by a student-leader with only a minimum of training, gathered after the lectures to discuss each topic for two to three hours. Adults joined the groups by invitation only and then with the clear understanding that it was on the basis of equality with the other members. It was a dangerous move, but proved to be a wise one.

What did participants gain from all this talk? To the staff the most startling benefit was the sustained, pervasive excitement and involvement evident during discussion periods as well as casual conversations during "free time" periods. The causes of this excitement, the revelations experienced by the students, are best expressed in their own words, in these excerpts from evaluation sheets filled out at the close of the Retreat. These quotations represent the ideas which recurred most often:

"My greatest gain was the incentive to read more because of interest aroused in major issues."

". . . the mental stimulation derived from *openly* discussing such problems."

"One of the greatest, single, sustained intellectual challenges and thus one of the most important steps in expanding, developing and reinforcing my philosophy."

"Some of the ideas in the reading were different from my ideas. Made me think them over again . . ."

"(I have gained) a definite respect for other people —their convictions, opinions and beliefs—"

"I was amazed to find others concerned about the same problems I am. The most unlikely people have really thought about things."

"This idea of talking about what's important—seriously—gave me an idea of what real friendship is. Have made friends—good friends—here."

"Enjoyed meeting those who were only 'hello' people before—enjoyed meeting student guests from North Van . . . should have more next time."

"Through discussion I learned . . . to change and modify ideas I had formerly considered absolute."

"I have learned to have respect for myself, for my opinions."

"Through the basic reading itself and lectures I gained a lot of new knowledge."

"More than anything else I learned that I don't know an awful lot."

"I never knew some of these problems and ideas existed before."

"Discussion forced me to clarify my ideas so I could

speak about them and defend them."

". . . being in close contact with people I could talk to about important things."

"It was one of the most enjoyable times of my life."

"Teachers became my friends . . . and even more important, my friends became teachers."

"Talking openly about some the 'forbidden subjects' (in school and at home) was reassuring and cleared away some of the cobwebs."

"The discussion of sex helped me to establish a personal code of morals."

The students seemed amazed and delighted to discover that they were not alone in their anxiety about the future, about sex, about developing a philosophy to live by and about current problems which touched their personal lives.

They were so eager to learn, to discuss and to ask questions that the most exciting class seemed dull by comparison. In fact, when the students were finally threatened to silence at night, discussion among the adults invariably turned to the possibility of preserving some achievements of the Retreat for the classroom; some student discussion also turned to this prospect.

Despite the unique characteristics of the venture and the select students involved, several conclusions deserve consideration. First, the use of small student or teacher led group discussions and seminars seem to be an extremely valuable means of encouraging interest, involvement and learning. This approach is not new, but with the limitation of large, unwieldy classes, has been largely unexplored here. Also, the use of controversial materials—books which express ideas opposed to those held by the students—seem essential in stimulating critical thought. There are political and community objections to this, arising, it seems, from the assumption that to teach a book is to explain it and have it memorized as catechism, and the assumption that students presented with a range of views or "immoral" language and situations are incapable of discrimination. But those involved in the Retreat intelligently challenged, criticized and modified; they thought and obviously enjoyed the experience. It was a shock, however, to hear many of them claim that this was the first time they had been really challenged to think. Perhaps our carefully selected curricula, in literature for instance, imply a standard to be merely accepted; our teaching procedures, often emphasizing facts and lists of memorized points, certainly seem to denigrate the very thinking process which education strives to nurture. A more balanced range of materials is definitely required.

It was also evident that the thinking process is greatly stimulated by maximum freedom. Many students claimed they had never spoken up in class because their teacher did not like them to disagree with his statements or, if they were allowed to disagree, because the teacher "never changed his stand" but "used every trick in the book" to discredit their viewpoints. "We don't want someone to give us the word," one girl said; "we want to think for ourselves." Surely this is what *we* want for our students, too.

Freedom without licence in the classroom seems possible if the teacher accepts the principle that he may not be right, or that there may be another point of view; if he goes out of his way to encourage challenge and makes the student feel his ideas have worth; if he asks only that the student support his view.

Teachers were amazed at the number of students struggling, and struggling seriously, to form a personal philosophy, despite the difficulties they experienced in resolving basic problems. They seemed to feel caught between the casual, sentimental idealism of school, the often frightening rigidity of parental discipline and training, the materialistic and sexual emphasis of current mass media, and the various influences of their religious affiliations. This concern resulted in the Saturday afternoon session's being referred to as "the big one." Professor de Bruyn's talk on Humanism stimulated discussion that lasted long after the two hours allotted. The young people's reaction emphasized the need, especially in the humanities, for emphasis on the integration of what one learns with how one lives; it pointed out that students must be actively encouraged and assisted in discovering a useful standard of values. More specifically, discussion revealed an urgent need for clinical education about sex and some guidance in the development of wholesome attitudes toward the subject. In most cases young people are not being informed by any other reliable source.

Perhaps these principles could best be employed in school by providing a period of time during which students at the senior level could investigate and discuss in small groups areas of interest not presented in our curricula: philosophy, religion, humanism, sociology, psychology, sex, etc. This would make it possible for students to participate in the organization of at least part of their studies and to pursue their own individual programs. It would also enable the teacher to foster free discussion in a permissive atmosphere. A seminar based on these ideas is being introduced for trial at West Vancouver Secondary School this year under the guidance of Vice-principal Harry Cullis. If there is any success in recreating the intellectual excitement of the Retreat in the classroom, it will be worthwhile.

Meanwhile the Retreat itself, guaranteed to recharge the batteries of rundown educators, will certainly be organized by the school again next spring. No teacher could ignore the opportunity to repeat an experience which evoked this reaction from Dr. Livesay: "This weekend gave me a renewed feeling of optimism about the future of humanism. These students are really prepared to consider honestly what a civilized society is like."★

The author, at present lecturing at the College of Education, was formerly head of the English Department at West Vancouver Secondary School. Anyone wishing information about organizing a "retreat" is invited to contact him. Photos by Derek Grant and Dave Tingey, West Vancouver Secondary School.

a matter of Opinion

Are We Giving Canada's Youth a Fair Deal?

JOHN FEARING

> Twice in a lifetime we have seen war produce in quite ordinary men and women heroic qualities of courage, endurance, and self sacrifice, and make permanently better citizens of those whom it did not destroy. Twice we have had to recognise that our ordinary systems of education had often failed to educe those qualities in peacetime.
> (Geoffrey Winthrop Young, mountaineer, lecturer in education, inspector of schools.)

Although it is debatable whether all the survivors of the last war became permanently better citizens, the dangers of wartime certainly produced opportunities (which are not available in our education system today) for men to show courage, endurance and leadership. The western meritocracy in which we live does not provide socially acceptable forms of activity to fulfil the need of adventure which is an integral part of the personality of normal young men and women. This frustration of a natural desire often leads youth to anti-social or delinquent behavior. Thrill-seeking takes on many familiar forms, from the screeching of tires on a "hot-rod" car to smashing beer bottles against the school wall, or even, occasionally, to setting the school buildings on fire.

North American city life in the latter part of the twentieth century is a boring prospect for any adventurous youth. His day is tramlined by stodgy routines and governed by the clock. Even the school sports in which he is encouraged to participate are run according to rules set down by adults. Belonging to the much lauded school team is often beyond his physical skill—it is surprising to note the small percentage of school population that can actually take part in overrated team sports—and he must therefore become a spectator. Competitions organized within the framework of a school or community provide real stimulation for him only if he is successful, and can be a source of utter humiliation if he fails.

The adventure of anti-social or delinquent behavior therefore holds great attractions for many youths. It can be a great thrill to outwit the police or even try to out-drive them in an automobile. Beer parties and gambling sessions provide "kicks," and party crashing is considered fair sport. Too often the potential leader becomes a delinquent adolescent thwarted into reactionary behavior by an adult world which respects only conformity.

Many countries, realizing the adolescent's need for adventure, have already established short term schools where adventure under controlled conditions encourages the development of responsibility. But adventure as an end in itself is not enough. Risks must be taken with real understanding of what dangers are involved, not just as mere displays of bravado. Responsibility to oneself is not enough either. An adventurer must accept his obligations to others and be fully aware of his responsibilities to them.

The Outward Bound Trust in Britain, following successful prewar experiments at Gordonstoun School in Scotland and Salem School in Germany, has established two sea schools at Aberdovey and Burghead, and two mountain schools at Ullswater and Eskdale. There is also an Outward Bound school for girls in North Wales at Capel Curig. Other countries have followed the experiments with interest, and in 1951 the first Outward Bound school (inter-racial) was opened in Nigeria. In 1955 Malaya founded one at Kuala Lumpur. Germany has an Outward Bound school which began operations in 1952 at Weissenhaus on the Baltic Sea, and a mountain school which was opened in 1956 in the Kleine Walsertal in Bavaria.

The aims of these Outward Bound schools are summed up in the fourfold conception of the decline of our diseased civilization quoted by the County Badge Experimental Committee, which tried with some success to develop a system of standards among high schools in prewar Britain.

The Four Declines.

1) Decline of initiative as a result of the widespread disease of "spectatoritis."
2) Decline of fitness as a result of modern means of locomotion.
3) Decline of skill as a result of

The author, a Vancouver teacher, is on leave of absence this year.

the weakening tradition of craftsmanship.

4) Decline of concern about one's neighbor as a result of the unseemly haste with which daily life is conducted.

The function of the Outward Bound school is to train and develop the character of a generation of youth. Admission is not restricted to those with fine physique or high mental ability; the only requirement is good general health. Boys from all socio-economic backgrounds are accepted, and attend for periods of six to eight weeks as residents.

"The emphasis is quite simply upon the living of a life in the open air, in all weathers and under varying conditions, in which physical dangers and hardships are faced in small groups. The boys operate in patrols in which teamwork must be evident if the challenges of nature are to be met. They choose their own leaders from the patrol once they get to know each other, and they have to abide responsibly by their choice once it is made. They are given basic training in the skills they need when, for example, among the mountains, they learn how to use map and compass, how to use simple camping equipment, how to administer first aid, and how to rock climb. The purpose is not only to turn them out as competent mountaineers or sailors. Many of them may never become regular mountain or sailing enthusiasts once the course is over. The course is not a training for the sea and the mountains; it is a training through the sea and the mountains. The purpose is to place the boys in situations in which by facing hazard they must face themselves. Character is formed when the pressure of danger means that risks have to be clearly seen and cheerfully accepted. This is easier when you belong to a team and mutual support is given within a patrol, but it also makes demands of loyalty and co-operation upon the individual boy. Venturing out into new experiences upon the mountains and sea teaches many youths that there are things they can achieve which they had thought impossible. They also experience the humility of knowing their own unavoidable limitations. The emphasis is upon competition with self rather than with others, and further importance is laid upon the service to the community which the schools demonstrate. Most schools form mountain rescue patrols or coastguard units or combine to help in forestry work. Here there is a balanced training providing all the excitement and adventure needed, but all within a framework of personal and social responsibility".[1]

Many of the Outward Bound schools, and such similiar establishments as those at Gordonstoun and Salem, have developed community service as an important aspect of their curriculum. Included are life boat drill, coast guard watches, first aid and artificial respiration, forestry work, fire fighting, rescue operations of all kinds and other "samaritan" activities. The headmaster of Salem took a hundred boys from six nations to Greece in 1954, and, himself acting as foreman, succeeded in building a home for old people in the earthquake-devastated region of Kephallonia. Too often our social system denies meaningful responsibilities to its adolescents and, by lengthy high school and university training, unwittingly prolongs their "growing up" period until well after physical maturity.

Primitive civilizations often do not have the adolescent problems so prevalent in our Western society because the onset of puberty is taken as an indication that the youth is ready for adult responsibilities. If we were prepared to allow our young men and women more opportunities to be responsible for real tasks, much of the characteristic loutishness and listlessness of adolescence could be avoided. The zest for life found in young children need not be replaced by blasé indifference if teen-agers were allowed to cope with natural hazards by being exposed to situations involving an element of calculated risk. Responsible attitudes could be developed by deliberate idealism and service.

Canadian cities make available to adolescents many worthwhile activities, ranging from YMCA and community center activities to baseball leagues and Boy Scouts. Baden Powell's leadership and vision have had fine effects upon many young lads, but in only a very few cases, does the appeal of scouting continue to attract boys of adolescent years. Sports and pastimes sponsored by other organizations often have the limitations of team competition rather than competition with one's self, and the majority of our nation's youth still seek after adventure without knowing where to find it.

There is no Outward Bound school in Canada yet, and I believe we are very short sighted in not learning from the success achieved in other countries. In British Columbia we have the ideal terrain for setting up a mountain school—perhaps in Garibaldi Park—and a sea school on the west coast of Vancouver Island or in the Gulf Islands. Organization and staffing could be accomplished in a short time if interest were shown by school boards and the Department of Education. Kurt Hahn, who worked in the original school experiments at Salem in the early thirties and, after Hitler's rise to power, at Gordonstoun, has suggested that funds to start such a venture might be sought from the charitable foundations and trusts. "Some of them have rendered great service in preserving ancient monuments and other treasures. There is no more sacred treasure of a nation than the human nature of its citizens."[2]

References

1. Ronald Goldman "Adventure and Responsibility"; *Education Review* (Leeds) Volume 10, 1958.

2. Kurt Hahn "Outward Bound"; *Year Book of Education,* 1957.

Industrial Education

Continued from page 125

It is human nature to resist change and shop teachers and administrators are no exceptions. Those who defend the industrial arts program could claim quite proudly that it teaches basic skills and a knowledge of common power tools, so that students can enjoy a satisfying hobby in their leisure time. Industrial arts provides, too, an outlet for the emotions and talents of some boys; they work out their frustrations in an acceptable manner. In some cases they even design their own projects. They learn what quality means and develop a pride in finishing an item; they may also discover a like (or dislike) for a certain trade and develop their future plans accordingly. The weakness in industrial arts, however, is that it does not satisfy the needs of all our students in an age of rapid industrial development. The occupations of most of our General Program students will be in industry, but industry is continually organizing and becoming automated, thereby determining the occupations available. Our students should be aware of what industry has to offer, what it expects, and how it may treat them. One needs only to look at want-ads to see that industry is demanding integration of trades. The millwright, for example, must be blacksmith, rigger, carpenter, pipe-fitter and machinist all in one. Moreover, industry requires more than just men with mechanical abilities; it has need of clerks, time-study men, designers, accountants and salesmen. Students who are provided with an opportunity to experience work that relates to industry will be better prepared, not only to choose a vocation, but also to meet the changes that industry will inevitably make. Industrial education, as I have defined it, would differ from industrial arts in that more emphasis would be placed on industrial practices and methods as they exist now (not as they existed five years ago) and less on specific skills and trades.

Two-part Program Suggested

A partial outline of an industrial education program will be enough to show how valuable it could be to our students. In this program, the first half of the year consists of the regular industrial arts course of studies geared to a project that can be completed by February. During this period the basic tool and machine operations and the related theory are taught. In the first half, however, the drafting periods are used as the design and engineering stage for the production project that will be scheduled to begin in February. Lawn chairs and wrought-iron furniture are two common production projects. The teacher organizes his drafting class along the lines of an engineering department, with his students classified as engineers, chief draftsman, designers and draftsmen. In mixed classes of University and General Program students the boys are assigned to jobs that suit their intellectual needs. Designers present sketches for study, engineers check structural details and revise the sketches, draftsmen develop working drawings, the chief draftsman checks and approves the drawings, and the chief engineer (teacher) gives final approval before issuing drawings for production. This engineering stage in the production of a project is not fantasy; it is a real-life situation that provides an appropriate intellectual challenge for all students.

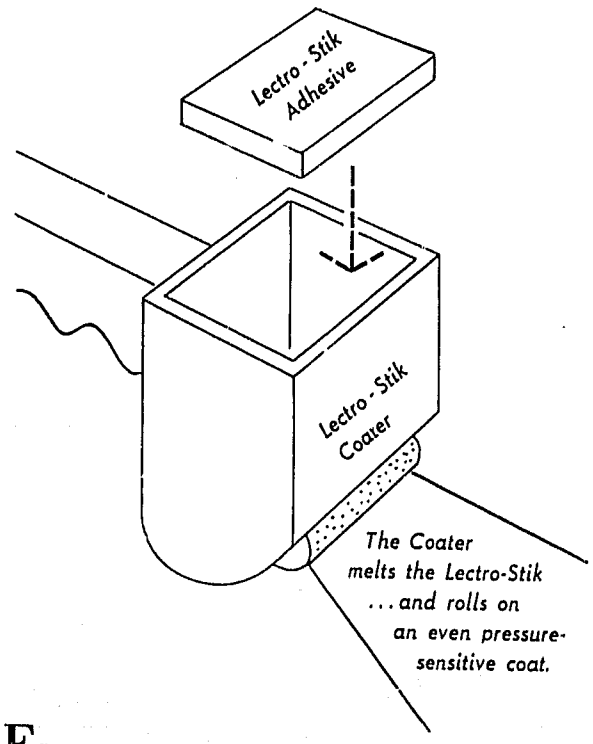
Industrial education can become a successful course even for those students with below average mechanical ability. Students who would normally become discouraged in industrial arts because of poor coordination or because of a physical handicap can find a place in some department of industrial education. There is, furthermore, a direct correlation between student drop-outs and student success. Industrial education, by providing an opportunity for all students to succeed, would be instrumental in keeping our students in school longer. As a result a sound vocational guidance program could be developed. The students would have brief experiences in the many departments of industry set up in the shop and, with the advice of the counsellor, would be prepared to plan their careers intelligently.

Teacher Can Make Up Own Program

It would be false even to suggest that industrial education can be carried out easily; in fact, to cover the course properly would require a degree of imagination and ingenuity far greater than that called for in industrial arts. Present shops are not arranged to suit production methods and in some cases they may be poorly equipped. However, the *way* of setting up the program is not impossible; it depends essentially on the *will*. An imaginative and energetic teacher can make up his own program suitable to the industry in his area or can organize programs similar to those already operating in some schools. Industrial education is not new; it has been carried on at an increasing rate in the United States for the past ten years and industrial arts and vocational magazines contain many articles describing various programs. The surprising part is that these programs do not require any special equipment to begin with; they do, however, require a high degree of organization on the part of the teacher. The challenge to set up a true industrial education program is great, but the value to our students will make the effort involved worthwhile.

The industrial education program I have proposed would not likely remain static; it could develop in step with industry. Through co-operation with local industry, tours of various operations could be made each year. Speakers from industry and employment agencies could be used to keep pace with new developments. The success of industrial education and the progress it made from year to year would depend on the initiative and ingenuity of the shop teacher.★

What's New?



EVER HAD trouble trying to mount pictures on cardboard or on walls? Here's a new device which, while probably not solving all picture-mounting problems, will go a long way toward solving many of them.

The Lectro-Stik Company of Chicago manufactures an electric wax applicator called the "Lectro-Stik," which keeps a special wax compound at a just-melted temperature. The base of the applicator contains a 1" wide tooled wheel or roller. After the Lectro-Stik is warmed thoroughly, the roller is run across the back of a picture. A thin coating of wax 1" wide is deposited on the picture back. The applicator is used to cover all the back of the picture. An 8" x 11" picture can be coated in less than a minute.

The picture is now ready for mounting. It will adhere firmly to cardboard, paper, wood, varnished plywood walls, glass, plastic, clean blackboards, metal sheets or any other relatively-smooth, firm material. Place the back of the picture against the surface on which it is to be mounted and with the palm of the hand, smooth down the picture from the center outwards. The picture will adhere and make a good temporary mount. A more permanent mount can be made by using the edge of a soft, wooden burnisher (provided with the applicator) to smooth the picture down. The permanent mount will last for months.

Care should be taken to ensure a smooth, even, all-over coat of wax on permanent mounts. One mount, in a B.C. school, is of a heavy paper map approximately 54"x42", on a varnished plywood wall. The map is still firmly adhering after seven weeks.

Should it be necessary to mount a picture or announcement on the inside surface of a glass showcase or window, the surface of the pictures may safely be coated. The wax will not affect colored inks.

Permanent mounts of such materials as magazine or newspaper pages, which deteriorate quickly and become quite ragged, may be made by mounting onto light cardboard or bristol board. The pictures will remain bright, clean, neat and re-usable for years of service.

Removing mounts from plywood walls without damaging the varnish or the picture is relatively easy. Don't pull or peel the picture from the wall! Carefully loosen one corner about a half inch and then fasten a small bulldog clip to the corner. Leave the picture and clamp overnight. The weight of the clamp will gently peel the picture from the wall. This method of removing the picture prevents any damage to the wall or the picture.

Pictures which have a good wax base need not be re-waxed for subsequent re-use. Simply mount the picture as many times as you need.

The Lectro-Stik is sold in Canada by the Canadian Linotype Company Ltd., 829 Oxford Street, Toronto 18, Ontario and is available, with a plentiful supply of wax, for approximately $13.00.

Special Note

This department would appreciate a letter telling of any programs you have produced or which you know have been produced in B.C. or elsewhere in Canada. Copies of the programs would be appreciated, too, together with information as to where further copies may be obtained.

Whatever response is received will be noted from time to time in this column. If the response is large enough, a listing of Canadian programs will be made available to interested teachers.

Across the desk

Support for Mr. Duyvewaardt

Vancouver, B.C.

The Editor,
Dear Sir:

Mr. Hamm's criticism of Mr. E. E. Duyvewaardt's article is most surprising for he is blatantly guilty of the errors which he implies have been made by Mr. Duyvewaardt. Having re-read Mr. Duyvewardt's interesting article, "Programmed Instruction in the Classroom," (April issue) I can find no justification for the conclusions reached by Mr. Hamm. At no time does Mr. Duyvewaardt make or imply generalized conclusions from his limited experiment; indeed, he goes to particular pains to point out the limitations of his experiment and seems perfectly aware of the restricted nature of his research and the reasons for it. It seems inconceivable to me that his article would induce "overgeneralization" in anyone, with the possible exception of Mr. Hamm.

Mr. Hamm, on the other hand, indulges in an orgy of overgeneralization from specific experiments, which, although comprehensive in comparison with Mr. Duyvewaardt's modest effort, are in themselves strictly limited. How anyone can state that light can be shed on the reasons for Mr. Duyvewaardt's conclusions regarding an experiment carried out at the Grade 8 mathematics level in Canada by an experiment of a totally different nature involving university engineering students in California, in which not one of the elements is parallel—is quite beyond my comprehension. To borrow a concept from one domain to use in another, without bringing its theoretical roots along, is to cut it off from much of its meaning and curb its usefulness.

Northrop (1959) suggested three stages that characterized fruitful enquiry in any field: (a) a first phase embodying an analysis of the problem in which the basic elements are discerned; (b) a natural history effort embracing observation, description and classification; and (c) an attempt at deductive formulation of a theory—a process in which inferences are added to facts in order to obtain concepts and testable hypotheses. The order in which these stages are pursued is not crucial, but each must be followed through thoroughly. I belive Mr. Duyvewaardt has made a good attempt to fulfil these requirements and has produced a testable hypothesis. The most important thing is that he has attempted to carry out a practical piece of research, on his own, guided by scientific principles, and has not been content to indulge in the most primitive form of research—second hand fact grabbing. For this more power to him; may many others be encouraged to follow in his footsteps.

Yours truly,
EX DOMINIE.

Teachers Must Assist

Kitimat, B.C.

The Editor,
Dear Sir:

May I have a wee space in your correspondence area to congratulate Charlie Young on his fine summary of our wonderful summer in Africa. I use the word wonderful in the sense that it was one of the most rewarding experiences of my teaching career. I heartily endorse all the things Charlie had to say about our African colleagues. David Rubadiri and Shad Khonje would stand out in any community.

I returned more than ever convinced that the developing countries must have help from experienced and mature people. I found that I had learned a great deal myself and that this type of project is no one-way street. There is a great deal which we do not understand about our fellow men and a great deal of our so-called "knowledge" is false or distorted. I am sure that we all returned with a realization that many of our pet theories had been seriously challenged.

Finally, I feel that our duty here is plain. I think it was Rousseau who said, "It is contrary to nature that the privileged few should gorge themselves with superfluities while the starving multitude are in want of the bare necessities of life." Could it be that our constant boasts about our high standards of material living and about our supply of consumer goods reveal a lack of real appreciation of the needs of the less fortunate?

Yours truly,
WILLIAM R. LONG.

P.S.

Charlie: "Once you work in Africa you leave a bit of your heart there." Correct?

Bill

Lively Discussion Refreshes

Victoria, B.C.

The Editor,
Dear Sir:

Teaching is exhausting; but Mr. Cianci (*The B.C. Teacher*, November '63) has the secret of the rejuvenation engendered by meeting the challenge of "unsettling" ideas.

How gloriously "unsettling" is Norman Cousins' "Why Johnny Can't Write" in the same issue!

Cousins' "unsettling" ideas and

their wider implications deserve lively and diligent exploration by our educational pioneers.

Meanwhile, good luck to all our Ciancis who in lively discussion will be refreshed and rejuvenated, and whose exploration of new ideas may well result in significant offerings to sober, down-to-earth committees.

Yours truly,
ERIC H. WHITTINGHAM.

We Are Complimented

Enderby, B.C.

The Editor,
Dear Sir:

Congratulations on the two excellent editions this fall.

I read the first copy from cover to cover and thought it one of the best yet. I wondered, perhaps, if I had forgotten issues of other years, but as I listened in our staffroom and in the corridors, I heard others remarking on the splendid issue.

Later I had the unusual experience of being able to read the second issue from cover to cover in one sitting. It was truly good. Many teachers appreciate the small helpful items you tuck in.

Keep up the good work!

Yours truly,
RUBY E. LIDSTONE.

A Letter of Protest

West Vancouver, B.C.

The Editor,
Dear Sir:

I am enclosing a copy of a letter I have written to the executive of our local association.

Yours truly,
ERNIE ADDICOTT.

Dear Madam:

I have been disturbed for sometime over the inept action of the teachers in their endeavors to convince government and people that the pupil-teacher ratio needs drastically reducing, immediately; that more classrooms must be built, immediately; and that more funds must be earmarked for education, immediately.

I was saddened to see and hear that the only solution the teachers —locally and provincially—have to these urgencies is to go on asking for higher salaries.

In view of my feelings in these matters, I can do no other than resign my official position in the local association, and my membership of the BCTF Convention Committee. Please convey the contents of this letter to the local executive, and inform the chairman of the Convention Committee of my resignation—he will probably require a substitute from our local.

Yours truly,
ERNIE ADDICOTT.

about People

Ralph K. Bell

In June of this year Ralph Kennedy Bell passed away in Calgary. He was well known, especially in District No. 24, for his genial nature, lesson aids, tests and little textbooks.

Born in Ingersoll, Ontario, he attended schools in Victoria and graduated from Victoria Normal School in 1913. He attended summer sessions each year and graduated with his B.A. degree from UBC in 1937.

Mr. Bell taught in Shawnigan Lake, Britannia Beach, Lytton, Vancouver, Enderby, Armstrong, and Kamloops. He retired in June 1961 after teaching for thirty-seven years in Kamloops. He went to live with his son in Calgary but taught another year and a half at Carbon, Alberta, before illness overcame him.

Mr. Bell possessed a remarkable memory and was personally interested in all descendants of his earlier pupils, who were many, for he taught three generations in Kamloops.

He entertained his staff with many stories of his earlier experiences and especially enjoyed telling the younger members about his first salary—sixty-five dollars a month!

Our sympathy is extended to his son Wilfred and to his four grandchildren.—J.T.

Mrs. Georgina G. Burge

With the death of Georgina Gwendolyn Burge on October 20, 1963, the teachers of this province lost a devoted friend.

Mrs. Burge received her education in Vancouver, graduating from Britannia High School and the Vancouver Normal School. After returning to teaching in 1954, Mrs. Burge attended UBC Summer Session and was awarded the Bachelor of Education Degree in 1961.

Before her marriage she taught in the Creston area, and for the past eight years taught Grade 4 in the Saltspring Elementary and Secondary School. Her choirs were perennial winners at the Cowichan Music Festival. Mrs. Burge, a woman of kindly insight, gentle nature, and keen intellect, will live long in the hearts of her pupils and fellow teachers.

Mrs. Burge was a devoted member of the BCTF. She served on the Vancouver Island District Council for six years. She resigned only because of poor health.

As a person and teacher, Mrs. Burge was always seeking the best in those surrounding her. She maintained an unfailing positive regard for her fellow man. She refrained from criticizing others, and in her gentle way would suggest their admirable qualities. Yet, toward the close of her earthly life, even she was repeatedly astonished at the "goodness" of her friends.

Mrs. Burge is survived by her four children, Barry, James, Georgina and Carol; her mother, Mrs. G. McLaren, and her brother, Bruce McLaren.—J.M.E.

Roderick Campbell

Roderick Campbell, who joined the BCTF office staff last August as Research Assistant, passed away suddenly on November 22 in his 54th year.

Scottish born and educated, Mr. Campbell had taught English for two years at the Quesnel Senior Secondary School.

He had a great love for music and dramatics. During the summer festival in Barkerville he worked as a stage director and actor, re-enacting life in the historic gold-rush period.

Although he was associated with them for only a few months, the BCTF office staff will miss him keenly. His good humor, his willingness to share and to co-operate and his ready wit made him a welcome working partner.

Our deep sympathy goes to his widow and six children.—C.D.O.

new Books

ESTHER G. HARROP, Book Review Editor.

ENGLISH and LITERATURE

Looking and Thinking, by A. Elliott-Cannon. Oliver and Boyd, Edinburgh, 1962. Illus. 65c

Here is a book made from a combination of exercises for pupils and answers to correct their work. The teacher is warned that the main elements in English are listening, looking, thinking, talking, reading and writing. He is also told that the pupils must be acquainted with all of these six forms. All of the pictures are to be used in training the children's powers of observation and there is accompanying the 28 questions based on observation an answer leaflet. Teachers could make up a booklet of this kind for themselves, to be used in the work of junior high school grades.—E.G.H.

Story Caravan. Edited by Alexander Turner, Margaret Brown, and E. Benton Miser. Holt, Rinehart and Winston, Toronto, 1962. Illus. 404 pp. $3.25

A well bound book with a good and varied selection of excellently written, interesting stories, including a large section of poems pleasing to children between 9 and 13 years. Recommended for reading-aloud stories, as there is a choice of fairy, adventure and factual ones.—S.K.B.

FRENCH

Dictionnaire Canadien. Prepared and published by the Lexicographic Research Center, University of Montreal, Quebec. 1962. $5.95

Dictionnaire Canadien is the first bilingual Canadian dictionary, giving both international standards of French and English in pronunciation, usage and spelling, and also giving terminology and style which are peculiar to the French and English languages in Canada. This dictionary is the result of seven years of intensive research by the Lexicographic Research Center, which was established to study Canada's two official languages and to give to the Canadian people for the first time a dictionary which would be a practical working tool for communication and understanding between our two great cultures.—M.C.

MATHEMATICS

General Mathematics, Book II, by Brown, Simon and Snader. Clark, Irwin and Co., 1961. 640 pp. $5.50

A Grade 10-12 text for mature high school students that actually contains a wealth of meaningful, understandable and attainable exercises. Throughout the text the authors inculcate assessing the reasonableness of an answer. The discovery approach is always used, thus presenting an honest challenge to the student. The text does not give a rule to be blindly followed. The skillful construction of text, examples and exercises always gives the student a chance to reach some generalization before it is formally stated. Fundamentals are reviewed and used in different and interesting ways. Numerous puzzle questions placed strategically throughout the text act as excellent motivators. Text covers numbers, mathematics on the job, measurement, mathematics and your pay, algebra, geometry, mathematics and security, consumer mathematics and formulas, area and volume. The chapter on measurement is particularly well done. This text is far superior to present G.P. text, for it talks up to the student, not down at the student.—A.J.D.

Mathematics Enrichment—Program A, by George Spooner, Longmans Canada, Toronto, 1962, Cloth, x + 177 pp., $3.15; *Program B*, 1962, Cloth, viii + 212 pp., $3.15; *Program C*, 1963, Cloth, viii + 198 pp., $3.15

This series of three programmed instruction booklets deals with Sets, Geometry and Numeration. Each book deals with the three topics, going into more detail in each succeeding program. Very suitable for Grades 4-6, for both the bright and the slow students. The author recommends a sitting of from 10-30 minutes, no more, no less. Each program contains numerous "Try it" sections, quizzes, reviews and tests. The material used in the three programs is much like the SMSG Elementary texts. Exposition is at all times very clear and consistent. Don't pass up these books—your elementary students can profit greatly.—A.J.D.

MISCELLANEOUS

Philosophy—A to Z, by James Gutmann. Grosset and Dunlap, New York, 1963. 343 pp., index. $2.95

This useful volume is based on the work, mainly, of Alwin Diemer and Ivo Frenzel. It is a good reference work for the teacher's personal library, if he has a philosophical turn of mind. The book is also valuable to the general reader because of the clear explanations for many complicated philosophical concepts. It is suggested that teachers of the social sciences who are preparing for their Masters' oral exams would be wise to read this work over carefully in order to answer historical-philosophical questions with the greatest possible dispatch.—W.D.M.S.

Questions Teen-Agers Ask, by Sheila John Daly. Dodd, Mead, Toronto, 1963. Illus. $4.00

Here is a moderately good addition to the book collection in the Guidance Department of the school. Some points are practical and these will be useful to counsellors. Young people will enjoy the chatty style of the book, which is set up in the question-and-answer form.—E.G.H.

Bulletin Boards for Subject Areas, by T. A. Koskey. Clarke, Irwin, Toronto, 1962. 32 pp. booklet. $1.65

Almost 100 diagrams illustrating maximum use and effectiveness of your bulletin board are included. Basic principles of bulletin board use are amply and cleverly illustrated. Art principles are used. Samples cover English, social studies, science, mathematics, business, home economics, speech, fine arts. A very useful source booklet, but the price seems too high.—A.J.D.

Sports Illustrated Book of Basketball, by Lippman. McClelland and Stewart, Toronto. $3.75

A complete and exceptionally well illustrated book for all aspects of fundamental basketball. The best sections are perhaps those dealing with shooting styles and fundamentals of a simple 2-3 offense. Omitted, however, are sections on team defense formations and shooting variations often applied below junior classification.
—M.G.S.

MUSIC

Songtime, 3, by Russell, Wood, MacDowell and Winter. Holt, Rinehart and Winston, Toronto, 1962. No price quoted.

This book contains words and music intended for sight reading and rote for Grade 3. The sight exercises are simple, but the songs by rote lack interest; therefore this book loses some of its value.
—D.S.L.

The Technique of Orchestration, by Kent Wheeler Kennan. Prentice-Hall, Englewood Cliffs, N.J., 1952. 13 plates of music instruments; many examples of scoring. 321 pp. $6.75

Nineteen chapters cover orchestrating techniques for string, woodwind, brass, percussion and infrequently-used instruments. Special problems in scoring for sections and various combinations are also discussed. Each instrument is treated individually in great detail. A list of terms

and a chart of ranges is included. This addition to books on orchestrating is being widely accepted in university classes because of its clarity and compactness. —W.K.

Music Education for Teen-agers, by Wm. R. Sur and Charles Francis Schuller. Harper Bros., New York, 1958. Illus. $6.00

This fine book is used as a text for many university music education classes and should be in every school library for reference purposes. Every facet of music education is discussed in an inspiring manner, with pictures that show what can be done in this field. Each chapter closes with a summary, suggested activities and selected readings. Topics covered are choral and instrumental music, repair work, the exceptional child, music assemblies, recreational music, rehearsing, public performance, audio-visual music aids and the administration of the music program.—W.K.

PROGRAMMED LEARNING

A Guide to Programmed Instruction, by Jerome P. Lysaught and Clarence M. Williams. Wiley, New York, 1963. Diagrams. Tables. $3.95

This book represents a method of helping the reader to understand just what is a programmed instructional unit and how to develop it. It grew from the authors' experience in a teachers' training college and the subsequent teaching of programming to teachers and lecturers. After studying the material, teachers will understand more clearly just what the phrase "programmed learning" means; what they can do to select appropriate goals of instruction and evaluate a programmed sequence for student use. The book demands very careful, thoughtful reading. There are many useful diagrams and splendid biographical material included. Each chapter closes with lists of selected reading.—E.G.H.

Preparing Objectives for Programmed Instruction, by Robert F. Mager. Clarke, Irwin, Toronto, 1962. $1.75

This little book is of value not only to those preparing programmed material but to anyone who wishes to spend a couple of pleasant hours thinking about the objectives of his teaching. For Dr. Mager objectives are not high-sounding phrases which we generally ignore in order to get on with the business at hand, but rather statements which help us to know: what we expect to teach; how we will know when we have taught it, and what methods and materials will be most effective. It is suggested that if we can clearly state to the learner at the outset 1. what we wish him to be able to do; 2. under what conditions he will be required to perform the task; 3. what the acceptable standard for his performance is, we will be well on our way to helping him achieve these goals.

The book itself is programmed, which makes reading it a novel experience, and ends with a short self-test to see whether the author's objectives have been reached by the reader. Sixty pages, easily read, which are of interest to all engaged in education.—T.T.D.

SOCIAL STUDIES

A Course in World Geography, Book IV, The British Isles, by J. H. Lowry. Edward Arnold, London, England, 1961. (Dist. by Macmillan Co. of Canada Ltd.) $2.00

This could prove to be a useful student reference for a study of the British Isles. The text is easy to read and there are numerous good illustrations and diagrams throughout—N.R.S.

One Dominion, by George E. Tait. Ryerson Press, Toronto, 1962. $2.90

This text describes the history of Canada from 1800 to 1900. It is well illustrated with maps, diagrams and pictures. The historical accuracy of the book is enhanced by the author's vivid, interesting style. This book will be a valuable student reference at the junior secondary level.—N.R.S.

Three Nations. Canada, Great Britain, The United States of America in the Twentieth Century, by Gerald W. L. Nicholson, H. H. Boys, R. J. Rannie and A. E. Hobbs. McClelland and Stewart, Toronto, 1962. 437 pp. No price given.

Four authors have combined to write one of the most unconventional history texts of the decade. I believe it also to be the most disjointed of the decade. In unbelievable succession the authors jump from the London blitz to the explosion of the atomic bomb (with an unexplained picture of a mushroom cloud) to the "early enemy successes" and the phony war. In another case, from Canada immediately before the Second World War they switch to the National government elected in Britain in 1931.

Any attempt to write a one-volume history of the United States, Great Britain and Canada, regardless of their common backgrounds, can be nothing more than an unsatisfactory combination of the chronological and the regional. The authors have, however made it a most enjoyable book to read.

The major weak point of the book is the illustrations and the captions which accompany them. For instance, a picture depicting the 1926 General Strike in Britain is explained in the caption and the student is then asked, "How many bowler hats can you spot?" In another, showing a 1925 bus, the student is advised to "Note that streamlining had not yet arrived."

Pictures in student textbooks should not, in my view, be explained. Rather, the student should be directed to search out significant information from the pictures. If pictures are to be used as a teaching device, it is essential that they be carefully chosen.

In an interesting section on the Atomic Age, I failed to see rhyme or reason for the selection of the illustrative material. A picture of Calder Hall seemed appropriate, but one of the Kennedy-Nixon debates, the Bannister miracle mile, Jackie Robinson playing in the Montreal Forum and the Queen and Prince Philip at the Stratford Festival, in that order, made no sense at all.

The book does have an excellent bibliography (but both teacher and student), a few chapter-end thought questions, and a section in which the authors attempt to show how a text with their unusual arrangement may be utilized in teaching.—A.J.W.

This is Israel, by M. Sasek. Collier-Macmillan Canada, Galt, Ont., 1963. Illus. No price given.

Mr. Sasek's Israel is a land where biblical ruins and modern man's most sophisticated inventions stand side by side. Camels compete with Cadillacs for the right-of-way on superhighways. Oil pipe-lines cross the desert, but one may buy his fuel oil from a horse-drawn tank-car. In this book we see a land of many tongues and many traditions, where Christians, Moslems, Jews and Druzes worship in their own fashion. Children will be fascinated by the colorful drawings and will find Mr. Sasek's humor delightful. Adults will enjoy the author's charm and the pungent wit revealed in the commentaries which accompany the drawings. The book will be a valuable addition to any school library.—C.V.A.

for Your information

Statistics Teach a Lesson

Education pays off was the lesson to be learned from a recent address to the Burnaby School Administrators' Association by the Honorable William Hamilton, former Postmaster General of Canada.

Using the latest statistical information available (from the 1961 census), Mr. Hamilton compared two census areas of Vancouver. The people of Area 1 were substantially better educated than the average for the city as a whole; the people of Area 2 were less well educated than the average. The well educated group enjoyed a much higher income, and therefore a better standard of living than the other group. Here are a few of the census results.

	Vancouver	*Area 1*	*Area 2*
Average Income	$4,630	$7,840	$3,370
Incomes over $6,000	11%	29%	4%
Unemployed	5%	3%	9%
Average Value of House	$13,900	$25,700	$12,100
Houses with Automobile	72%	92%	41%

Trustees Oppose Gill Report

One of the reasons why Canadian teachers' organizations have unanimously opposed the suggestion that teachers should be covered under the terms of the Unemployment Insurance Act is that the employer contribution on behalf of teachers will have to be paid by the school boards, and therefore will be, in effect, double taxation. Moreover, the school board contributions to Unemployment Insurance will produce no significant educational return, direct or indirect.

We noted with interest, therefore, in the October 1963 issue of *The School Trustee,* the journal of the Saskatchewan School Trustees' Association, the following quotations.

"School trustees and other entities responsible for public education derive their entire revenues from provincial sources. They are not, in any sense of the expression, profit-making groups. This Association takes the strongest exception to all Federal legislation which imposes taxation directly or indirectly on any subordinate provincial level of government because: (a) it is contrary to good practice to impose taxation on a governmental group which must in turn impose taxation to raise the revenues required to pay such taxes; and (b) such federal levies siphon provincially-raised tax monies out of the provincial field, thereby compounding the difficulties of such financially hard pressed groups.

"The report of the Gill Commission on unemployment insurance has recommended that all school teachers be compulsorily covered under the terms of the Unemployment Insurance Act. If this recommendation is put into effect it will cost school boards, and hence local taxpayers, an average amount of $50 per teacher per year plus whatever increased salaries the districts will be obligated to grant to teachers to offset the contributions payable by the teachers. This total could amount to about 15 million dollars in additional costs to Canadian school boards."

The Trustees' Association has strongly urged, in a brief to the Royal Commission on Taxation, "that municipalities and school boards be relieved of any and all tax liabilities under all Federal legislation."

Many Teachers Using Programmed Instruction

A recent survey conducted by CTF Research Division estimates that some 350 Canadian teachers employed programmed instruction materials during the 1962-63 school year.

Favorable comments by most teachers who have used the technique suggest that programmed materials will find an increasing role as a supplementary teaching device. Extremely encouraging results have been obtained in remedial work, and in assisting students who miss school through illness or who transfer to a new school. The method also appears to hold great

promise for adult education.

A report of the CTF survey has been published as Research Memo No. 12, *A Survey of the Use of Programmed Instruction in Canadian Schools, 1962-63.* Copies are free from the Research Division.

A follow-up of this survey is also planned. CTF has arranged to make available free of charge units from some of the commercial mathematics and science courses to high school teachers interested in trying out and evaluating this technique.

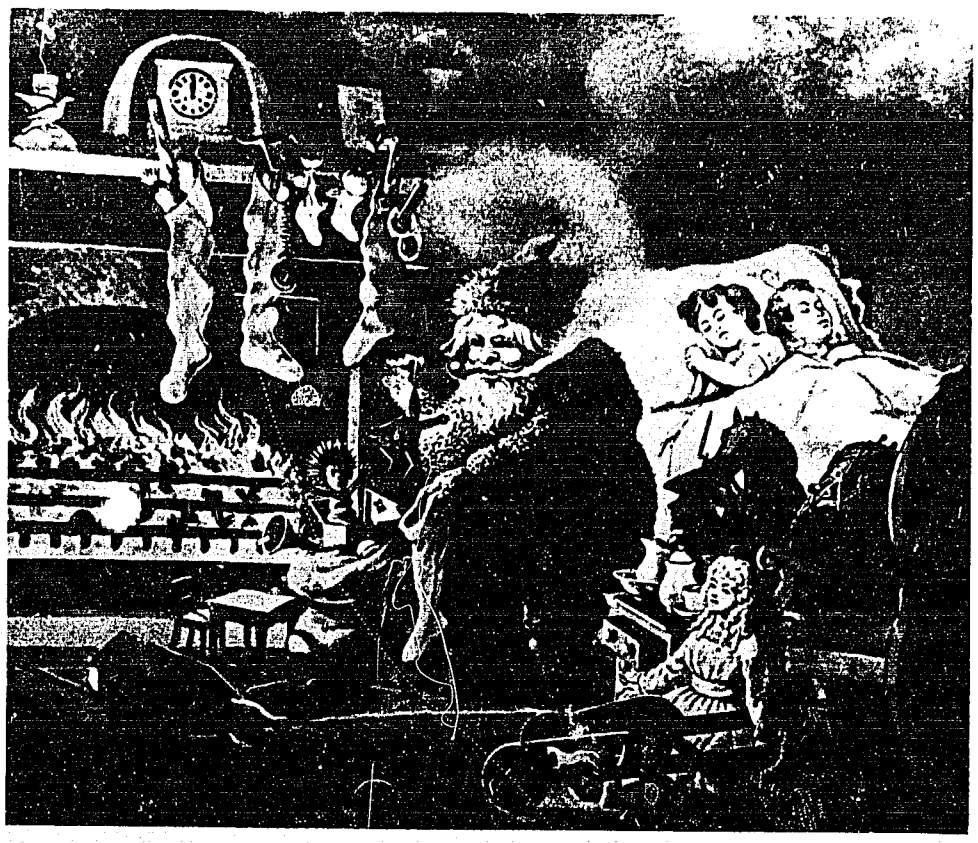
Another measure of the growing interest in programmed instruction is the extent to which the teachers' associations affiliated with CTF are holding workshops, seminars and conferences on this subject. Six affiliates have sponsored one or more such activities during the past three years, and of these at least five are planning to continue their program.

Du Pont Scholarship Program Continues

Du Pont of Canada has announced that it will continue its scholarship program designed to help improve science and mathematics teaching in secondary schools across Canada.

Under the program the company makes a total of 15 grants of $1,800 each through 10 participating universities, of which UBC is one, which select the scholarship winners. Since establishment of the program in 1956, a total of 139 teachers and prospective teachers have been awarded scholarships.

Each grant may be awarded in one of three ways: as a $1,500 scholarship in teacher training for a student intending to teach science or mathematics; as a $1,500 scholarship to enable a science or mathematics teacher to take a year of post-graduate work, or as five summer scholarships of $300 each to give secondary school teachers additional training in science or mathematics. For each $1,500 scholarship, the company grants $300 to the university for administration costs. If a winner of a $1,500 scholarship is a married man, the amount is increased by $600.



—Print courtesy of Esquire Socks Library of Footlore

"The stockings were hung by the chimney with care, in hopes that St. Nicholas soon would be there." In this old drawing St. Nick is busy at work, keeping up the age-old legend of filling Christmas stockings.

The Legends of Christmas

WHO WAS THE FIRST child to hang his stockings on the mantle in anticipation of a visit from St. Nick? Who sent the first Christmas card? Sang the first carol? Tossed tinsel on the first tree? Shared the first kiss under mistletoe? Enjoyed the first sip of wassail?

The answers lie in the centuries-old legends of Christmas.

First to gather about the wassail bowl—today, the traditional Christmas punch bowl—were the ancient Saxons. The word "wassail" is a Saxon toast meaning "be whole" or "have health." Through the years, the word came to mean any liquor used to toast health—especially the spiced drinks served at Christmas celebrations in the Middle Ages.

The basis of the mistletoe legend is an old Scandinavian myth which tells of the god Balder's narrow escape from death.

Loki, a malicious giant and menace to peace in the kingdom of Odin, ruler of the Norse gods, sought a way to destroy the beloved Balder.

Aware of the danger to her son, Frigga, Balder's mother, secured a charm which made him immune to injury from fire, water, air, or anything on earth. The only thing she overlooked was an unimportant, harmless plant—mistletoe.

Learning this, Loki made an arrow of mistletoe and mortally wounded Balder. In desperation, Frigga begged the gods to intercede and save her son—which they did. The grateful mother decreed that, from that moment on, the plant would be a symbol of love.

The mistletoe kiss is thought to be a survival of an ancient Norse marriage rite associated with the legend.

Not as old, but even more complex, is the legend of the Christmas stocking. The only fact that can be clearly established is that the first Christmas stocking was fashioned of woolen shreds—long before the days of Dacron blends.

One of the versions tells of the Bishop of Myra, a kindly clergyman who lived in 4th Century Asia Minor and later became St. Nicholas.

One Christmas, the Bishop learned of an impoverished merchant in his city who had two lovely daughters—both unmarried because their father couldn't afford dowries.

The compassionate Bishop, determined to help, dropped two bags of gold coins down the merchant's chimney on Christmas Eve. Coincidentally, the family stockings were hanging on the mantle to dry and the gold landed in the hosiery. St. Nick, the legend goes on, has been dropping gifts in stockings ever since.

The story, though plausible, has one loophole. Research uncovered the fact that hose were not made with feet until the 11th Century, some 700 years *after* the Bishop's bounty. Did St. Nick go around dropping gifts into bottomless stockings for 700 years?

A much more likely legend is the one crediting St. Francis of Assisi with the introduction of community carol singing. The word "carol" means "to dance in a ring." It is said that St. Francis staged a manger scene one Christmas with real people and animals. The onlookers were so delighted with what they saw that they burst into happy song. Those first carolers became as important to St. Francis' Christmas celebrations as modern carolers are to ours.

The origin of the Christmas tree can be traced to the deeds of another good Saint—Winifred. It is said he hewed down a giant oak to prevent a human sacrifice a group of heathens were holding in its shadow.

A tall, young fir suddenly appeared in the oak's place and St. Winifred proclaimed it a miracle, stating that from that day forward, families would gather about a fir tree—not for wicked deeds—but to glorify God.

If St. Winifred gave us the Christmas tree, Martin Luther gave us the custom of decorating it. While strolling through the countryside one Christmas Eve, Luther was awed by the sight of the snow-tipped evergreens sparkling in the moonlight. At home, he tried to recreate the scene for his family by placing candles on their Christmas tree . . . and we've been decorating our evergreen boughs at Christmastime ever since.

Our Christmas card custom is of relatively recent origin. The first was sent in 1843 by Henry Cole, English educator and art patron. It bore the now-classic greeting, "A Merry Christmas and a Happy New Year to You!"★

1963 Summer Conference Reports

New Techniques in Teaching

BRYAN M. VINCENT

TOO MUCH TIME and effort and too many words are expended today in considering what to do to, for or about the "poor" or "unqualified" teacher. Too little time and effort are given to considering how to assist the many good and conscientious teachers more effectively to use their talents and initiative.

The Summer Conference sessions on New Techniques is one way in which the good teachers can learn a little about what is new. Every teacher will neither need nor want every new idea or device, but every teacher should have the opportunity to evaluate what, among the new developments, is applicable to his or her teaching method.

Much of the time given to the sections on New Techniques was spent explaining, describing or demonstrating a few of the outstanding new developments. While many participants would have appreciated greater detail in specific instances, time forbade anything but a cursory survey of the novel modes presented.

The role of some audio-visual equipment as a means to enhance and fill out a lesson were touched upon. The use of 35 mm slide projectors and the acquisition of slides received special emphasis. 35 mm slides become an inexpensive, highly interesting and informative medium of communication when low-cost black-and-white direct process transparencies

are used. Mounted slides can be prepared ready for viewing for about 5c a slide, using simple home equipment and a home developing solution kit. There is little required of the amateur in developing these films other than the ability to follow instructions. It is quite possible to take photographs one day and view them the next day using a moderately good 35 mm camera and the above mentioned film.

The SRA reading kits sparked a good discussion in most sessions. Several of the conferees had had experience with these materials and were very generous in sharing their observations and conclusions. Many of the delegates found the discussion about the "Listening and Note-Taking Skills" of particular interest.

The overhead projector vs. the opaque projector was discussed at some length in some sessions. The subject of TOPS projection (tested overhead projection systems) opened a line of enquiry new to many of the delegates, as did a brief association with, and demonstration of, the "Trachtenberg Speed System of Mathematics." Several members felt Trachtenberg Mathematics might be well employed as a fresh approach for Mathematics 21 and 31 as well as a means of enrichment for select students.

Programmed instruction was deliberately left until the latter part of each day. The discussions were necessarily curtailed by so doing. Such a devious method of limiting discussion of programs was necessary, for many hours could have been quickly consumed discussing and examining these materials. A display, in a room separate from the discussion room, permitted those attending the conference to browse among many programs and much display literature. The delegates seemed to appreciate the opportunity to spend some time with the display and lights burned over the display until nearly midnight each day. The sections were in agreement that programmed learning materials will become a needed and invaluable teaching aid as programs are developed by teachers as supplementary material to good classroom teaching.

The most consistent conclusion to be drawn from the sections on New Techniques was the continuing need for similar workshops throughout the year at the local level. A number of suggestions for continuing this type of workshop or for disseminating information on new techniques were advanced and discussed. Chief among these suggestions were:

(1) Some means for informing all teachers of new techniques as they develop. Delegates favored a department in *The B. C. Teacher*, with special news letters playing a secondary role.

(2) In-service education should concern itself with bringing demonstrations and/or workshops to the various local associations.

(3) Provision should be made at the University whereby student teachers will be given comprehensive instruction in the use of audio-visual materials. New techniques should occupy at least a portion of this course.

(4) A section of the Easter Convention could concern itself annually with new developments during recent years. Some doubt as to the effectiveness of this suggestion was expressed.

(5) A special summer course be organized by BCTF or by the University, which students could attend for a week or two at no cost.

While many of the suggestions advanced are worthy of note, there remain many difficulties which must be overcome before any of these ideas may be inaugurated. Certainly the session at Vernon made some concrete attempts to satisfy the needs of teachers for knowledge of new developments.★

Public Relations Sessions

C. M. BAYLEY

THE PATTERN FOR the Public Relations sessions was created as my wife and I drove through the Fraser Canyon. The idea of workshop members establishing a PR program for an association of free enterprising cocktail lounge owners, emerged when we were above Hell's Gate; the problem of competition from the milk industry was added on the spot, in the classroom.

The mechanics made the sessions and revealed that some teachers would do well in public relations or politics.

Looking back, I know that two or three experiments collapsed with a dull thud, but this danger appears to be a built-in feature of group dynamics.

Most fun was in the daily interviews with Vancouver *Sun* reporter, John Arnett, especially when we tried to discover who speaks for education in British Columbia.

Most enlightening was the unfolding, through questioning, of "This is my School District."

Most imaginative were the segments, "On the stand," especially when the groups disagreed in their solutions.

It was a fabulous week. The general sessions with Ev Irwin, Harry Evans, Jim Cairnie, the lawyer, the doctor, and brilliant Dr. Clarence Smith, were a lasting experience.★

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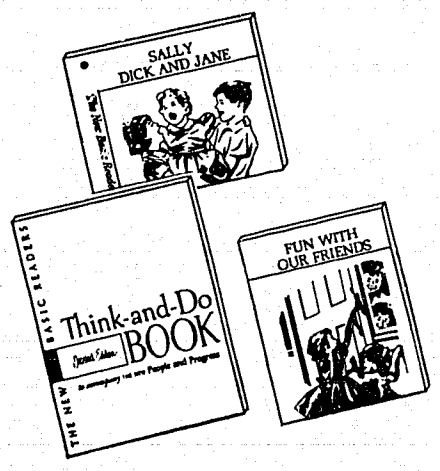

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