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IN THIS ISSUE

A message from the President to all members of the Federation heads the list for this first issue of 1964. See page 154.

Mrs. Barrett describes the development of the Shavian alphabet in the second of two articles on new alphabets, written especially for this journal. It begins on page 156.

School organization in B.C. is changing greatly. In his article (page 160) Mr. F. P. Levirs discusses many of the new developments.

Should sex instruction be given in the schools? In the article on page 163, Dr. McCreary reports the results of a survey she made during the summer of 1963.

The chief librarian of the Toronto Board of Education tells of the system used in that city to provide information for students. See page 167.

A teacher educated in Europe believes that oral examinations produce a better learning situation than written examinations. His article begins on page 170.

Dr. H. Klyne Headley considers the question 'What is a university?' in an article that begins on page 174.

The time lag from the discovery of a new understanding in learning theory to its general application to the classroom takes a generation. The article on page 176 offers some suggestions for overcoming this cultural lag.

OUR COVER PICTURE

Our cover picture this month shows part of Yoho National Park. The Photographic Branch of the Department of Recreation and Conservation supplied the color negative.

Articles contained herein reflect the views of the authors and do not necessarily express official policy of the British Columbia Teachers' Federation.

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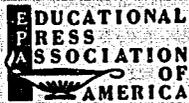
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EDITORIAL OFFICE: 1815 W. 7th Avenue, Vancouver 9, B.C. Published every month except June, July, August and September. Advertiser's copy received up to the 10th of the month preceding month of publication.

Annual Subscription, \$2.75;
Federation Members, \$2.00.

Authorized as Second Class Mail, Post Office Department, Ottawa, and for payment of postage in cash.

Member



Printed by Evergreen Press Limited

JANUARY 1964



PUBLISHED BY THE BRITISH COLUMBIA TEACHERS' FEDERATION
Affiliated with the Canadian Teachers' Federation

VOLUME XLIII, No. 4

JANUARY 1964

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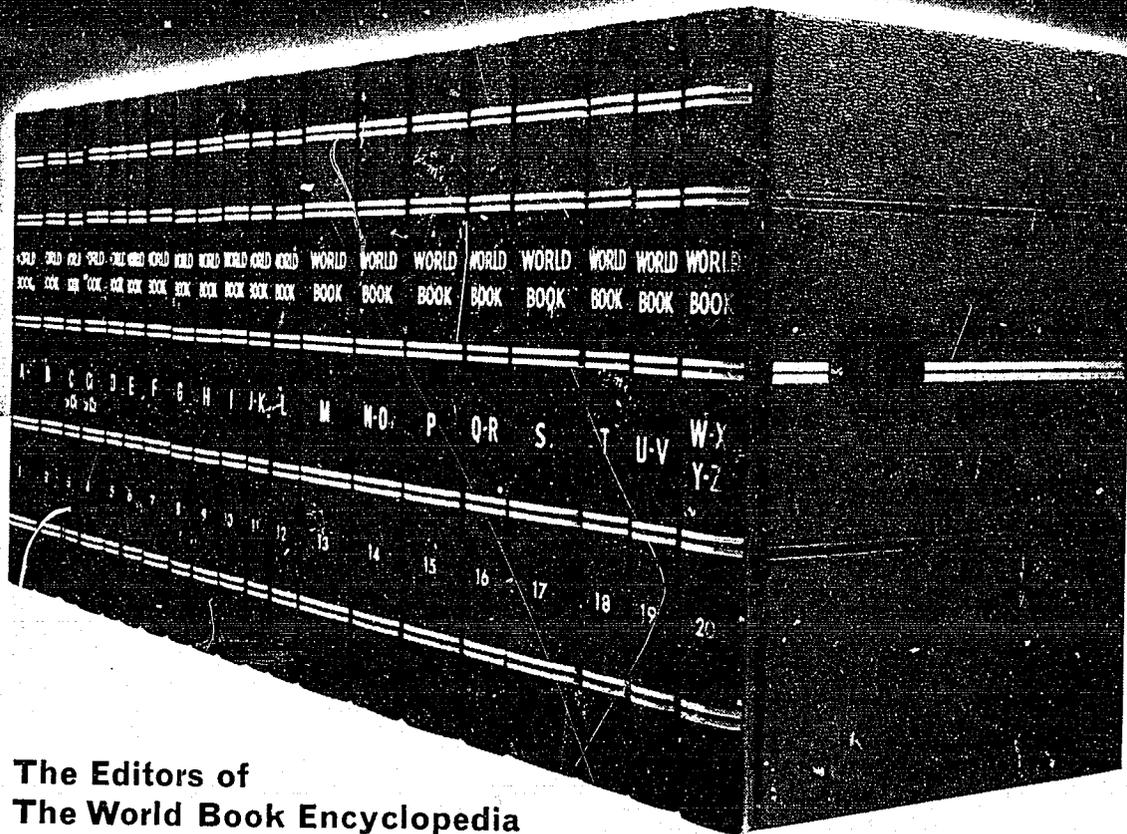
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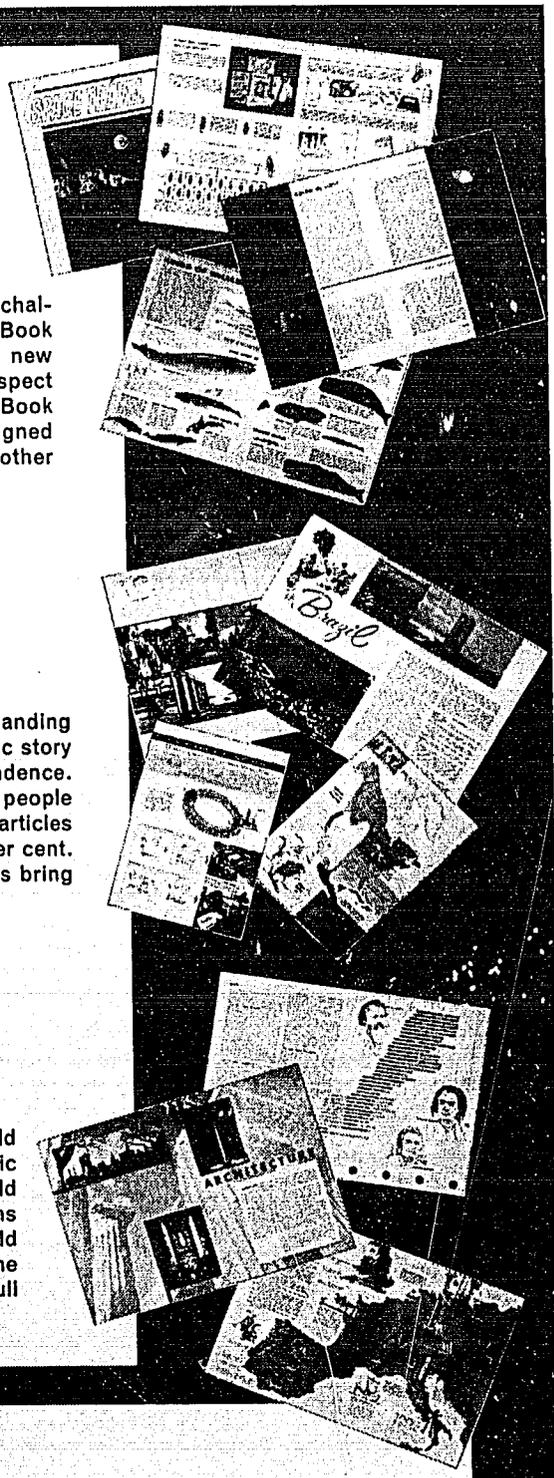
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Classes Are Too LARGE!

IT IS HIGH TIME the provincial government realized that elementary school pupils cannot be given the type of education they need when so many of them are placed in classes that are far too large.

A recent survey conducted by the Federation disclosed an alarming situation in many school districts. Of 713 elementary classrooms in three school districts adjacent to Vancouver, for example, there were 107 (15% of the total) with more than 40 pupils. In these districts there were 221 classes of Grade 1 and 2 pupils, of which 69 (31%) had more than 36 pupils!

Two of these districts were staffed at the elementary level in strict accordance with the entitlement formula of the *Public Schools Act*; the other had one teacher in excess of entitlement. Obviously, a revision in the entitlement scale used for provincial grants is imperative. When elementary pupils are placed in classes with more than forty other youngsters, how can teachers give each of them the type of education their parents want for them? How can teachers possibly achieve the close personal relationship with each student that is so necessary for really effective education?

The figures given above refer only to the elementary level. The greater complexity of the secondary school organization and curriculum, and the fact that both organization and curriculum are changing rapidly, make it more difficult to know the seriousness of the class size problem at this level. The overall ratio for each school is more favorable in the secondary school than in the elementary. Many more special provisions are made (including those for counsellors and teachers for industrial education and home economics).

However, the elective system results in classes which differ significantly in size. A class in an advanced elective course may be very small, while one in a constant subject may be very large. The class size problem will become more severe as our secondary schools do more in vocational education, for small classes seem to be a basic rule in vocational work. Obviously, unless entitlement figures are revised, other classes will have to be correspondingly large.

The B. C. Teachers' Federation has been trying to

convince the government for some time that the class size problem has reached the *critical* stage. The government did make changes in the elementary entitlement formula in 1961 and in 1962. Teachers appreciated these changes and were disappointed when the reduction in the entitlement formula did not continue in 1963.

The reason given by the government for its inaction on the class size problem is that a lack of teachers prevents it from liberalizing the teacher entitlement figures. We do not deny there is a teacher shortage. Indeed, we are desperately trying to overcome it, and deplore the ostrich-like posture of some school boards in this regard. However, we contend that large classes perpetuate the teacher shortage, rather than alleviate it. Perhaps the most common complaint of teachers today is increasing workload. A BCET study has indicated that among the factors contributing to heavy workloads, excessive class size is the one most often mentioned. The workload of a teacher who meets a class of more than 35 pupils for an entire school day can hardly be classed as reasonable. The mental and nervous strains on a Grade 1 teacher with a class of more than 40 are incalculable, and would surely not be borne on a continuing basis in any other profession. The result of such strains is that the profession is losing badly needed teachers at the worst possible time.

Because enjoyment of the teaching situation is one of the main factors in a person's deciding to remain in the profession, the relationship between class size and retention is obvious. Large classes are driving teachers out of the profession, yet we desperately need to retain all we can. An increase of even one year in the average retention time of women teachers, for example, would have a significant effect on teacher supply.

It is obvious, too, that oversize classes have a direct effect on teacher recruitment. Secondary school and university students are quite aware of unfavorable teaching conditions, and bear them in mind when considering their careers. Moreover, teachers are hesitant to encourage their own children to follow in their footsteps. Surely it is regrettable that present teaching conditions seem inimical to the growth of a family

tradition of teaching in the province. And what attraction is there for married women teachers with grown families to return to the profession, if all we can offer them is classes that are far too large?

Some will contend, of course, that if the entitlement figures are revised the metropolitan school boards will snap up the available supply of teachers to the detriment of interior and northern school systems. However, there are married women in the metropolitan areas who would be willing to return to teaching, provided they could do so in their home areas. Because these teachers cannot accept positions in other parts of the province, their employment by metropolitan boards would not interfere with the teacher supply for the rest of the province. We contend, therefore, that the entitlement figures can and should be liberalized. Moreover, we believe that every possible encouragement should be given to married women to return to the profession. We commend the Minister of Education for his efforts in this regard, and hope that school boards will show an equal interest. But as we have already indicated, married women are not going to return to teaching if classes are too large.

Fortunately, a few districts have become sufficiently disturbed about the class size problem to hire additional teachers (above entitlement). Vancouver has done this to a marked extent. However, the entire cost of such teachers must be borne by local property

owners, and school boards are understandably loath to add to the local tax burden. They have noted the statement made by the Minister of Education in the budget debate on February 23, 1963: 'The policy of the Social Credit Government on educational finance has been made crystal clear by the actions it has taken during its term of office. Simply stated, the policy is to provide the best possible educational system, and at the same time, to reduce the burden for the local taxpayer in general and the homeowner in particular.' They have difficulty in understanding why school districts should hire a great number of teachers above entitlement, at local cost, when the foregoing is the policy of the provincial government. Nevertheless, the time is overdue for local school boards to look seriously at the problem of class size and, if the provincial government will not provide relief, to make some steps in the right direction themselves by hiring teachers above entitlement.

It would be difficult to overemphasize the seriousness of the situation. Children are being deprived of a proper education, teachers are leaving the profession, and prospective teachers are being discouraged from entering. By refusing to adjust its teacher entitlement figures the government is making the teacher shortage worse.

Governments will act if voters become aroused. We believe it is high time the people of this province demanded smaller school classes.

Guest Editorial

IN THE IMMEDIATE shock of President Kennedy's assassination, Premier Bennett sought to express the respect and sympathy of the people of British Columbia by closing the schools for the rest of that Friday. The gesture had fine motives. But the consequences ought to be studied with a view to avoiding them another time.

In retrospect, undoubtedly it would have been wiser to keep the schools going for the rest of the day, perhaps after a short memorial period in each classroom—or even by a period where the children could discuss the event in groups with their teachers.

What must be remembered is that many sensitive and thoughtful children have very vivid ideas of the dangerous world in which we live. And all children, of course, rely for security of mind and emotions on the continuity of what goes on around them. Any major event that shakes this security comes as a matter of shock and fright to many of them.

Children in many areas—including this area—were seen weeping on their way home when schools closed down in respect to President Kennedy.

In some cases, particularly among American children, there was no doubt great personal sorrow. But there was also a good deal of personal upset and fear among younger children—and among those older children who know that the world is capable of self-destruction, but who aren't able to judge the implications and probabilities of sudden world disasters, such as Mr. Kennedy's death.

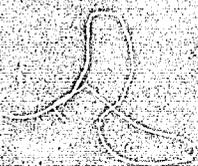
Such children let out of school without notice in some cases found no one at home to turn to in their distress. There were also young children who would be distressed at arriving home and finding no one there.

There is no intention here to reproach Premier Bennett for a gesture so well-meant on behalf of all of us. But there is an urgency for school and other authorities to give considerable thought to how great emergencies of this kind can be handled in future to spare young people the upset that some of them suffered.

—Ralph Daly, *News Editor,*
Radio Station CHQM.

What Do YOU Owe the Federation?

JAMES CAIRNIE



154

TO MY QUESTION-TITLE some wag will surely reply, 'Forty-four dollars.' I must confess this is quite true. Forty-four dollars it is, and many services are provided for your money. If it were not for the fact that I would be accused of bias, I would tell you it is indeed an excellent buy.

You pay money and you get services. The organization owes you that much. Does that mean you owe it anything? The answer, I believe, is 'Yes.' And I believe I can be rather blunt about telling you of your obligations to the Federation, for I am a teacher, still employed by a board—on a year's leave of absence, it is true—but nonetheless I feel myself one of you, rather than the representative of some nebulous group known as 'they.' What I say applies as much to me as an individual as it does to each of you.

In considering what we owe the Federation, I am inclined to start with the Code of Ethics. It is interesting that that statement of ideals begins with the sentence: 'The teacher's primary concern is for the quality of service rendered by himself and his profession.' I think the first thing you owe yourself, your pupils, their parents, your trustees and the professional organization to which you belong is a first rate job of teaching in the classroom.

I do not cast this out as some idle, idealistic platitude, to be noted and then promptly forgotten. The Federation as a body is most concerned about the quality of service rendered by its members. The proof of that concern lies in the fact that the Federation spends more of its money and staff time on the professional activities of the organization than on any other single phase. Our interest in teacher education and our continual drive to raise the standards of education required for entry to the profession, our interest in in-service education and willingness to finance major projects in that area, our participation in curriculum development, our initiation of provincial specialist associations—all reflect the concern our organization feels about improving the quality of service provided by our members.

Just as an aside let me tell you of a discussion I once had with a lawyer. I chided him a little on the difficulties the legal profession has been having with some of its members dipping into trust fund accounts. He replied that many of his colleagues were very concerned over their public image—pardon the Madison Avenue expression but it is descriptive—and he made the point that a group's image was based upon each citizen's impression of and regard for an individual member of the profession, the total of these individual impressions making up the mass image. No momentous public relations campaign could create, on its own, professional recognition for lawyers. The point is equally applicable to teachers. Professional recognition for teaching must come from an individual acceptance by members of the public that teachers in our classrooms are performing a function

THE B.C. TEACHER

in society that merits prestige of the highest order. You have an obligation to yourself and to your professional organization to render in the classroom service of the highest quality.

I began with the first line of the Code of Ethics; I must remind you of the balance of that document. You have an obligation to abide by the principles enunciated in the Code: To treat your pupils with respect and dignity; to respect the confidential nature of information relating to students that comes into your hands; to avoid exploiting the privileged relationship that exists between you and pupils; to honor your contract with the school board; to apply for advancement through prescribed channels; to refrain from accepting a position arising out of an unjust dismissal; to accept remuneration according to the salary schedule agreed to by your local association; to avoid derogatory criticism of a colleague, unless in so doing you inform the colleague and pass on the information to those who are in a position to do something about it; to respect the powers of the local association and the Federation; to examine the conduct of all Federation business and within the Federation to make such criticism as the facts may warrant.

The Code represents the ideals under which we practise the profession of teaching. It represents further the device through which we may exert some measure of control over those individuals who do not live up to expectations, who in fact bring dishonor upon the profession. You have an obligation to abide by those ideals.

As a third obligation I would suggest that you must accept the goals of the Federation as your own goals. You have to provide, for lack of a better term, 'good followership.' Federation objectives and policies are developed in as democratic a way as we can possibly devise. Each of us has the right within the Federation to initiate, question or criticize objectives and policies. If we are to achieve the goals agreed upon we must act in as unified a manner as possible. The goals of the organization must be our goals and vice versa.

Followership does not imply a blind loyalty to the organization. Heaven forbid that we should hold all statements of Federation policy as some sort of sacred promulgations. However, there seems little point in establishing policies if we will not support them in our personal contacts with colleagues and members of the public. It is essential in pursuing major objectives in the areas of economic welfare and professional development that we speak with one, not many voices.

That loyalty the Federation needs and has the right to expect.

You also have an obligation to participate in the affairs of the Federation. The Federation represents the only body active in education which consists solely of teachers and acts solely on behalf of teachers. It is the *only* collective voice we have. Its maintenance and growth are dependent upon the enthusiasm



James Cairnie

and support of its members. We are not so naive as to believe that in any given year we are going to get the active participation of all our teachers. In any organization a relatively small group provides each year the energy, the time, the voluntary help, the enthusiasm, the leadership that make things go. That group is continually changing; we have an obligation to see that such a group persists each year and that from that group we select the leaders who can contribute most to the development of our organization.

The minimal participation expected of each of us is that we examine critically the activities of the Federation, if for no other reason than to see that we are getting the type and caliber of leadership we want. There is an old saying that in a democracy people get the kind of government they deserve. If you are going to deserve the best in leadership, in objectives, in policies, and in service, you must contribute.

Finally I would suggest you owe the Federation a certain respect for its traditions and accomplishments, for they are based upon the ideas of the teachers who preceded you. The many accomplishments represent the results of time, energy and hard work. I would not argue that we should hold the Federation and its past in awe. Far from it. However, I think we should not treat too lightly the ideals of our predecessors and the contributions they have made to the development of the Federation. The history of the Federation is short; the list of its accomplishments is long. The benefits we share today represent the product of the efforts of hundreds—nay thousands—of teachers.

I hope that our colleagues of the future may look back upon our period of effort in the Federation with pride and respect.

The second of two articles about new alphabets. Mrs. Barrett, the wife of a retired naval commander, now lives in Port Alberni. She both writes and lectures about the Shavian project.

An Introduction to Shavian, the New British Alphabet

PAULINE M. BARRETT

THE FUNDAMENTAL FUNCTION of all writing systems is the representation of sound by sight. In the long story of human communication the sounds of speech existed countless ages before any attempt was made to express them in visual form. Primitive man uttered his "Ahh!" and his "Ugh!" and his "Psst!" in primeval forest and cave, and when the sounds had been uttered the words were gone forever; forest and cave were silent again.

In the beginning there were only the sounds. Long, long afterwards came the symbols to record them. A realization of this truth is the first and most important step in a scientific approach to the study of all writing-systems. Acknowledging this, the serious student will quickly recognize that the value of any system of writing is in direct relation to the efficiency with which the written symbols represent the uttered sounds.

A spoken language is a living thing, ever-changing, ever moving with the tides of time and history: as subject to stress and strain, to birth and death and accident, as the human beings who use it every day. It keeps pace with the times.

The written language tells a different story. When man puts pen to paper he becomes self-conscious, careful, conservative, even stubborn. He takes all

the liberties he likes with the language when he speaks, but he will not—and indeed he cannot—make free with the established order of the written word. For a hundred reasons—social, academic, economic, personal—he will write as his father, his grandfather and his great-grandfather wrote, because that is the best way he knows.

So, as time passes, the spoken word and the written word grow farther and farther apart. How would the spoken English of two and a half centuries ago sound in the classrooms and living rooms of today? Yet the writing of English is still based on the dictionary published by Dr. Samuel Johnson in 1755, and even then his official alphabet of twenty-six letters was mechanically inadequate to the needs of the time.

Through the centuries there have been several brave attempts to reform the English alphabet, but only the scholars cared; only the specialists and the dedicated language-students took any interest in them. Not one of them reached the public, to be tried out in the rough-and-tumble of popular usage.

So matters stood, until the advent of George Bernard Shaw—a realist, a wit, an intellectual and, in the later years of his life, a wealthy man. His realism apprehended the need for a new alphabet, his wit brought it home to the popular mind, his

intellectualism saw the way to its achievement, and his money was bequeathed for the accomplishment of his plans.

The difficulties were many. Many were the voices raised against a movement so opposed to the established order of writing the English tongue. There was ridicule, and there was hostility. Perhaps worst of all, there was indifference. His bequest was greatly reduced by the processes of British law, but the determined and devoted efforts of a small group of people, including the Public Trustee who was the executor of his will, were finally successful in securing a sum of money to launch the campaign for a new alphabet. Accordingly, a world-wide competition was announced early in 1958, eight years after Shaw's death, with a prize of £500 for the best design for a proposed new British alphabet, the design to follow certain principles laid down by Shaw, both during his lifetime and in the text of his will.

About four hundred fifty designs were received from all parts of the world, and the prize was eventually divided equally among four designers, one of whom was the writer.

Design for a new Alphabet

These four in collaboration with each other, the judges, the Public Trustee and a leading professor of phonetics in an advisory capacity then did further work toward the production of an alphabet which should closely follow Shaw's own expressed ideas of what was required. The result of this work was published in November 1962.* The type for the new alphabet, to be known as SHAVIAN, was expertly designed by Mr. Kingsley Read, a professional typographer and one of the four prize-winners—and also a correspondent of Shaw's for a number of years. This book is at present the only publication in Shavian. It includes, besides the text of the play *Androcles and the Lion* in both alphabets, the old and the new, a number of valuable suggestions by Mr. Kingsley Read for those who wish to practise Shavian; the foreword and the introduction tell briefly the story of creation of the new alphabet; and there is a reading and writing key for ready reference, in the form of a card placed in the book.

Shaw stipulated, *inter alia*, that the new alphabet should not be a system of shorthand; that it should be neither an extension nor an adaptation of the existing alphabet; that it should consist of a new set of between forty and fifty letters to represent the sounds of English speech, based on the fundamental phonetic principle of ONE SOUND/ONE LETTER; that his play *Androcles and the Lion* should be transliterated into the new alphabet, that this transliteration should be printed side-by-side with the play in the orthodox

*The Shaw Alphabet Edition of *Androcles and the Lion*: Penguin Books, 85c. Distributed in Canada by Longmans, Toronto.

alphabet, and that copies of the book should be given to public libraries throughout the English-speaking world. The primary object of the new alphabet should be the saving of time, labor, space, materials and money, without sacrifice of clarity in the writing of English.

An examination of Shavian will show that Shaw's wishes have been closely carried out, and that the product of several years' work on the part of all those concerned is a practical, labor-saving, simple and efficient system of representing in writing the sounds of English speech.

Considerable research has established the fact that there are between forty and fifty common speech-sounds in the English language. These are basic sounds. They may be shaded to many hundreds more, if one takes into account all the differences in pronunciation attributable to regional, personal and physical factors. Such a wide range is not required in a practical phonetic system. The forty-eight sounds represented by the letters of the Shavian alphabet are instantly recognizable.

Each of these basic sounds is represented by its own individual symbol in the new alphabet, following the dictum of Shaw and of all advocates of alphabet-reform—that there should be a letter for each sound. This is far removed from the practices of the orthodox alphabet, the alphabet of Dr. Johnson. These forty to fifty speech-sounds have been in daily English use for centuries, and for centuries there have been but twenty-six letters to represent them in writing—twenty-six letters strained to the breaking-point not only of themselves but also of all those students of the English tongue who for years have striven to master the vagaries of the written language.

Inadequacies of Present Alphabet

Consider the letter "a." How many functions must it fulfil? In the sentence "Mary's father kept a small boat at Swallow Lake" it occurs eight times . . . seven times with a different sound and the eighth time virtually silent.

On the other hand, consider this sentence: "Busy women give money to encourage foreign missionaries." The single vowel-sound of "i" as in "bit" is written in no less than nine different ways. In a practical phonetic alphabet, these nine spellings would be reduced to one.

Examples could be given endlessly to show the extent to which the existing alphabet is inadequate to represent the sounds of today's spoken English, and to indicate the difficulties inherent in the system and the pitfalls which await the unfamiliar reader. Among those which have become classics are the words in the *ough* group. Offhand one can think of at least five different standard pronunciations of the combination o-u-g-h. Consider, too, how overburdened with letters is a word such as "eighteenth." It contains five basic

speech-sounds, but requires *twice* that number of written letters.

The Shaw Alphabet for Writers

Double lines between pairs show the relative height of Talls, Deeps, and Shorts. Wherever possible, finish letters rightwards; those starred * will be written upwards.

Tall	Deep	Short	Short		
peep	⌋ = ⌋	bib	ff	l = h	eat
tot	1 = 1	dead	egg	l = c	age
kick	d = p	gag	ash*	∪ = 7	ice
fee	J = f	vow	ado*	r = 7	up
thigh	θ = ρ	they	on	∩ = 0	oak
so	S = 2	zoo	wool	V = A	ooze
sure	L = 7	meaSure	out	< = >	oil
church	⌒ = 2	judge	ah*	5 = 2	awe
yea	\ = /	*woe	are*	∩ = ∪	or
hung	ℓ = γ	ha-ha	air*	∩ = ∪	err
	Short	Short	array*	∩ = ∩	ear
roll	C = C	roar		Tall	
mime*	∩ = ∪	nun	Ian	r = W	yew

Turning to Shavian, one will see that the forty-eight units fall into three groups; there are twenty-four consonants, sixteen vowels and eight compounds. The letters are of three types, called "talls," "deeps" and "shorts." Careful attention to these three types of letter is essential in accurate Shavian writing. Typographers would speak of "ascenders" and "descenders." A "tall" letter reaches above the line, like the orthodox letter *t*. A "deep" letter reaches below the line, like the orthodox letter *g*. A "short" letter rests on the line, neither ascending nor descending.

There is no separate form for a capital letter in Shavian. Capitals are indicated, where necessary, by a dot placed before the letter to be capitalized; this is called the "Namer" dot.

The words shown beside the symbols in the illus-

tration are the names of the letters, in the same way as "aitch" is the name of the orthodox letter *h*, and "kew" the name of *q*. The Shavian names have a practical function, however, in that they contain the sound which the letter represents. They are also necessary for purposes of reference, identification and the spelling out of a word.

Two Special Vowels

Particular attention is drawn to the Shavian vowel called "ado" and its compound called "array." These two letters represent a complete innovation in an English writing-system, and serve to point up the truly phonetic character of the new alphabet. Their introduction is so revolutionary that many beginners in Shavian have asked for guidance in their use. Yet the sound of "a" in the word "ado," light and indeterminate as it is, is the commonest speech-sound in the language, and its inclusion is essential in a working phonetic alphabet. Statistically, it has the highest frequency-occurrence of all English speech-sounds. The great phonetician Henry Sweet called it the "neutral" vowel. Professor MacCarthy, in his "Notes on Spelling" in the book referred to above, speaks of it as the "shwa" vowel.

Having no letter of its own in the orthodox alphabet, this unaccented or neutral vowel is spelled with a variety of letters and letter-combinations. It occurs four times in the phrase "the common hippopotamus," and is spelled each time in a different way—with *e*, *o*, *a* and *u*. In Shavian it would be spelled each time with the letter called "ado." The letter called "array" represents this unstressed vowel when followed by a liquid "r" sound, as shown in the italicized syllables of the words *brother*, *martyr*, *Kaffir*, *perhaps*, *inter-view*.

These two Shavian letters are never used in a stressed syllable. When this is fully understood, it will be seen that Shavian spelling may also be a guide to pronunciation, from the important angles of stress. For instance, the word "convict," written in the orthodox alphabet without context, gives no clue as to whether it is a noun or a verb. Shavian spelling would indicate, by its choice of vowel, whether the first syllable is to be stressed or unstressed, thus differentiating between the verb and the noun.

It will now be seen how necessary it is for writers in Shavian to abandon completely the usages of the orthodox alphabet and to return to the basic principles of sound. An intelligent beginner in Shavian will mentally or orally divide a word into its separate speech-sounds, and will then find those sounds in the Key by studying the letter-names. Opposite the letter-name he will find the appropriate symbol to express his chosen sound in writing. He will then copy the Shavian symbol exactly paying careful attention to its type, whether it be tall, or deep, or short. He will use lined paper, or a line-guide, and will make tall or deep letters twice the height of shorts. At first he will make

his letters big and bold, just as a child does when writing his first words. He will not aim at speed; this will come with practice. If from the beginning he takes pride in forming his letters accurately and gracefully, just as a golfer is taught from the beginning to hold his club correctly, he will have nothing to "unlearn" as he progresses, and will soon feel the fascination of writing as he speaks, and of conveying his words to paper easily, clearly and attractively.

But, you may say, surely this new freedom of choice in spelling must lead to sheer anarchy! Not at all. Good Shavian writers endeavor to maintain a reasonably educated standard of pronunciation when writing for others to read, with consistency in their choice of letters. Regional differences are perfectly allowable, as are differences in pronunciation dictated by personal convictions or educational standards. The main object must always be as Shaw himself visualized it—clear and recognizable communication, achieved with a minimum of labor, time and space.

Experience has shown the originators of the new alphabet that facility in writing Shavian comes more quickly than speed in reading. For that reason one should not let an early attempt to read the Shavian script of *Androcles* cause any discouragement. The script is small for a beginner, when one considers the size of the letters in a child's first reading-book. It was necessary that the type in the book should be of the same size as that of the orthodox version on the facing page, for purposes of comparison between the space occupied by the old alphabet and the new. (Shavian fills only about two-thirds of the space occupied by orthodox type).

Children Learn Easily

It has also been found that young children take quickly to Shavian, and are enthusiastic over their success with the new letters. They are not hampered by long usage of the old forms. To a child, "ooh!" is just that; not *o-u-g-h* or *e-w* or *o* or *w-o* or *u* or *u-e* or *o-u*. "Ooh! Who threw two new blue shoes?" presents few difficulties in Shavian, compared with orthodox spelling. Again, *sh* to the child is just one simple familiar sound, and in Shavian there is just one simple letter to express it on paper, whereas the child writing in orthodox spelling must learn, perhaps to his dismay, that it can appear in half a dozen different disguises . . . "She assured me they would be sure to have a special French edition."

Boys in some of England's public schools are being encouraged to use Shavian in their correspondence. There are instances of its having been made the theme for essays and term-papers. Members of University faculties are writing both in and about Shavian. Correspondence groups are in action on both sides of the Atlantic, with a fortnightly circulation of letters. Enquiries are being received daily from all parts of the world, including North America, Australia, India, Pakistan, Malaya and South Africa.

Interested readers should write to Mr. Kingsley Read, Abbots Morton, Worcester, England. A Shavian portable typewriter is being manufactured.

It was never Shaw's intention that his new alphabet be made to replace the old one by official act. He believed that there would be room for both the old and the new for different purposes, in the same way as there is room for two systems of numerals, Roman and Arabic. He felt that after running side-by-side for a time, each system would find its place. The alphabet of Dr. Johnson is a venerable and historic medium of communication, slowly evolved through centuries of use, and rich in tradition. It is worthy indeed of our respect and affection. But just as the Roman numerals became too cumbersome for growing use by the increasing numbers of mathematicians and other literates (who today would willingly write MCMLXIV instead of 1964?), so may the picturesque circumlocutions of Dr. Johnson's alphabet give way to the simple clarity of Shavian.

Second Language Possibilities

Finally, and perhaps most significantly, there is the international aspect of the new alphabet. The writer has traveled much in many countries, and has heard over and over again of the enormous difficulties which the writing of English presents to those who would learn the language. It has been said repeatedly that, while spoken English is not hard to master, the written language, so overburdened with irregularities, eccentricities, and sheer contradictions, is endlessly discouraging and frustrating. Is Shavian perhaps our last chance to establish English firmly as the acknowledged second language of other countries throughout the world?

Beyond this, it is earnestly hoped that the new straight-forward system of sound into sight may eventually be adapted to any language by means of a few appropriate additions and/or substitutions. Great interest has been expressed, especially by colleagues whose countries use a non-Roman letter-system, in the development of Shavian as an international alphabet for popular use. There are over eighty alphabets in use in the world today, and there is, of course, the International Phonetic Alphabet. But the latter was designed as a scientific instrument for linguists, and does not lend itself to ready use by the layman. Let us look forward, therefore, to the day when a language-student of any country in the world may, by reference to his International Standard Reading Key, find himself able to pronounce and read the written words of all other countries.

Language has long been a formidable barrier between the peoples of the world, and any advance in human communication would be of inestimable value at this stage in the world's history. Communication is the first step toward understanding, and only through greater mutual understanding can international harmony be achieved.

Changing School Organization

F. P. LEVIRS

MOST BRITISH COLUMBIA teachers are familiar with educational changes that have occurred since the releasing of the *Report of the Royal Commission on Education* in December 1960. Many will recall the mixed and often heated opinions expressed, the Government's decision to implement the intent of the Report as early as possible, and the steps taken to ensure that changes would not disrupt the plans of those already committed to an existing system of secondary schooling. General planning is now virtually complete to the end of Grade 10 and is well under way for the remaining secondary grades.

By 1967 B.C. will have elementary schools enrolling Grades 1 to 7 and secondary schools enrolling Grades 8 to 12. Some elementary schools will have kindergartens attached to them; some secondary schools will enroll Grade 13; but neither of these extra services will be compulsory. Kindertartens will probably become more common; the future of Grade 13 is less certain as regional and school district colleges develop.

The elementary schools will continue to perform the function they have always performed in the academic structure—to give *all* children the basic learnings on which further learnings are built. We hope, however, to continue to revise and refine the subject matter taught, in conformance with modern needs. Indeed, I believe it is at the elementary level that the

major need for change, albeit less spectacular change, may lie.

Here are some questions that demand solution.

1. While the aim of developing character has been advanced as a primary aim of schooling, is not this also the primary aim of other educational agencies? Should not the school's contribution to attainment of this aim lie in its unique facilities for promoting intellectual development as an integral part of developing ethical values?
2. Should not the addition of kindergarten at the lower end and Grade 7 at the upper end have major implications for all of the aims, responsibilities, practices and potentialities of the elementary school?
3. Although the idea of a 'common' curriculum in the elementary school is based upon the fact that there are basic needs common to all pupils, is it not true that these 'common' needs can be satisfied only through differentiation of teaching methods to provide for different rates of learning, and that these different methods may necessitate changes in administrative organization.
4. Has there been a change requiring re-interpretation in the concept of 'fundamentals,' e.g., facts and information in relation to principles, relative values of subject areas, etc?
5. Should there be a change in our thinking regarding the place of subject-matter specialists in our elementary schools? Inevitably, then, is there a place for

departmentalization or platooning?

6. Should curriculum bulletins place more emphasis on final goals than on grade standards if the principle of continuous progress for the individual is to be encouraged?

7. Should there not be more emphasis on the continuity of learning through elementary and secondary schools?

8. Will not changes in curriculum influence the need for changes in accommodation and physical facilities in elementary schools?

These are but a few of the scores of questions that have been discussed at meetings of the Professional Committee on the Elementary Curriculum. The sampling will serve to illustrate how far-reaching their implications can be for the structure of the future elementary school.

Classes for Handicapped Children

Parallel to the regular elementary program will be the work of those special classes in public schools that attempt to meet the needs of handicapped children. These pupils require special services, equipment, methods and, in some cases, radically different curricula, but insofar as possible they should be educated as are other children, within the public school system with such changes from the normal program as are necessary.

Most children who complete the elementary school will proceed naturally to a junior secondary school or the junior section of a five-grade secondary school.

The new junior secondary school is not a pale copy of the old junior high school; it is a bold, new adventure in school planning, a school in its own right. It is based on the longest experience in Canada with the 6-3-3 and 6-6 grade systems, a lively appreciation of their advantages, and an equally honest appreciation of their defects as they appeared in thirty years of practice.

The junior secondary school is designed to do specific things. Since virtually all children are likely to go to it, it must supply a common education at the secondary level for those in early adolescence. It is important to note that this is a secondary school with more emphasis on the intellectual and less on the emotional approach to learning. The fact that it is a school common to all rules out any rigidly differentiated programming whereby students are forced at an early age by an external authority into one or other fixed patterns.

Again, since it is the last school where all are pursuing the same general goal, it must provide to all those learnings necessary to further development and best learned at this level. This is why there is great emphasis on constant or core subjects, subjects which take up from 88 percent of a pupil's time in Grade 8 to 67 percent in Grade 10.

The electives, courses designed to whet the interests and employ the peculiar capabilities of each pupil,

are not to be chosen lightly or without purpose, but as part of the pupil's plan and as a result of proven achievement. Sequence of courses is provided, so that the student may learn that any study becomes effective only through a disciplined approach.

This school must also give pupils a wide experience with the varying fields of study. For example, pupils are given a taste of foreign language study in Grade 8. The naive principle that a student could explore through having a wide election has been discarded; obviously free choice without prior experience nullifies any possibility of becoming acquainted with the fields not chosen. In Grade 8, therefore, there are few electives but many compulsory subjects and, in Grades 9 and 10 electives must be chosen with a conscious purpose.

Once the pupil is in a position to elect with clear knowledge of his purpose, he has both the opportunity and the encouragement to begin more intensive study in the field of his choice. This occurs in either of the upper grades of the junior school, where it is possible to take a number of courses in languages, or industrial education, or whatever other field of study the pupil wishes.

Many Secondary Programs Available

If the pupil's goal is clear, he must attain it through the process of qualifying at the junior level for further study at the senior level. At the senior secondary level, there will be many programs available throughout a range of academic, technical and vocational areas. For each of these, there is a series of required options in Grades 9 and 10. There is no entrance to a program through failure in another, only through qualification for the program chosen.

One problem is that pupils at the age of fifteen or so are not always clear on their future plans. Although there are children who at a very early age know exactly what they want to be and are capable of being, at least 50 percent of the fifteen-year-olds have only nebulous plans. Some would 'like to be' but want more experience to be sure they can be; others are sure of their field of work but not of their place in it. Provision is therefore made for these pupils to carry two or more qualifying options, so that a variety of programs will be available to them in the senior school.

Obviously, any choice made without guidance is likely to be based on false premises; educational counselling within the school therefore assumes major importance. Such counselling must be based quite clearly on the pupil's past achievement, which is used to demonstrate to both him and his parents his already manifested potentialities and limitations. This is the work of the counsellor—not forcing a pre-determined choice on the child, but giving him the information on

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which *he* can base an intelligent choice among educational programs.

Parallel to the regular program in the junior secondary grades lies a special program, the occupational program. Past experience has shown that 8 percent to 15 percent of pupils, because of inability or lack of interest or inclination, fail to make a success of the regular program, fall behind, and usually leave school within a year or so of the compulsory age for attendance. They leave with a sense of failure and with little to suit them for the adult world they enter. It is little wonder that they often furnish a high percentage of the misfits of our complex civilization. In addition to this group are the educable retarded who have, by dint of hard and patient work in special classes, gained a mastery of the bare essentials of the tool subjects but who are unlikely to be able to proceed much farther with formal studies.

Requirements for Occupational Program

For these groups a three-year program has been developed, specifically designed 'to equip certain young people with useful skills and knowledge necessary for early entry into the occupational and general life of the community.' The three years are organized to provide a division between classroom and practical experience, the latter increasing toward the third year.

Entrance to the occupational program is strictly controlled and is denied to those who show any aptitude for success in the regular program. Applicants for the first year must be at least fourteen years old, must have been retarded at least two full years in school for reasons other than illness, and must have shown by consistently low grades in school their lack of aptitude for academic work. Parental consent is required before the pupil enters the program. The *requirement* for entrance is that the pupil concerned should have definite interests and some capability for success in a practical type of program whose incentive and outcome is employment.

The program is not so much designed to give training in any specific job as to develop in young people the qualities that will make them successful in the types of employment likely to be open to them. They must learn the attitudes that will make them acceptable to employer, fellow employee, and the general public. They must learn how to work, how to dress and how to comport themselves. Actual job experience is a part of their training, to provide a setting in which all their instruction will take on new meaning.

Plans are well under way for Grades 11 and 12. When the pupil completes junior secondary school he will, unless he is among those few who prefer to train for a skilled trade in a provincial vocational school or on an actual job, enter a senior secondary school on one of the many programs for which he has qualified.

There will be a variety of programs available, for

any one of which a student must qualify. In the course of planning are the following: programs that would lead to further education at the university level; similar programs leading to the institute of technology or like institutions; at least three vocational commercial programs (secretarial, accountancy, general business)—three vocational industrial programs (construction, mechanics, specific trades)—three vocational service programs (foods, textiles, home and industrial service)—programs in fine arts; and programs in agriculture.

The general pattern in all these programs will be similar. All will have a common core of constants, probably four courses in the fields of English, social studies, guidance and physical education. Each program pattern will also have its own constants. Each sub-program will require its own specialties, probably five to six courses in each specialty. Finally, each student may have to complete a minimum of two elective courses which may be quite outside his particular program.

Any student who graduates from senior secondary school will therefore have completed a specific program. There will be no hit-and-miss conglomeration of courses, taken without other purpose than the collection of credits. It is unlikely that the credit system, already removed from the junior secondary school, will reappear in the senior school.

Many Topics not Discussed

Space has not permitted a discussion of such things as the increased responsibility of the principal and staff of the school, who have been given new authority; the flexibility designed to accommodate small and large schools; the nature of resource courses; the methods of selecting courses; the removal of the credit system; the questions of promotion and examination; the disappearance of prescribed time allotments; the increase in numbers of courses that a pupil will take; the new nomenclature for schools; the problems of block and mosaic timetabling. Perhaps enough has been included however, to indicate the general philosophy of the reorganization.

Probably the main characteristics of the new organization are these. All students, whether or not they intend to enter university, are given purposeful education, education in which the goals are evident not only to the educationist, but also to the pupil and his parents. The general program disappears. Provisions for individual differences is maintained but without permitting a pot-pourri of unrelated courses. Studies are sequential. The student is not forced into a choice at one specific time when he may or may not be ready, but gradually and naturally channels himself into a pattern which becomes increasingly more specific as time progresses. Finally, the quality of the whole school system is maintained as it must be in a democratic society by demanding of each the best he can give in the field in which he is best able to give it.

A pilot study has indicated that a planned program in sex instruction should be formulated for the schools of our province.

Sex Instruction for B.C. Schools???

ANNE P. McCREARY

ONE OF THE MOST controversial issues in education today is whether or not sex education should be introduced into the schools of our province. Reports seem to indicate that teen-agers, parents, teachers and doctors favor the introduction of sex instruction in the schools. However, opinions have come primarily from (a) people who have had experience with some form of sex education in the schools and (b) those who were interested enough to comment. Information has not been collected in a systematic way. Nevertheless, these preliminary reports do suggest a need for further investigation.

The concept of sex instruction as part of the school curriculum is so new that few guidelines are available to assist administrators in setting up such a program. Questions which arise center around who should instruct, when instruction should begin and what content should be included.

The writer conducted, as a preliminary study, an exploratory survey of teacher and parent opinion, to provide answers to the general questions stated above. The results do not provide all the information necessary for the planning of a program in sex educa-

tion but indicate the direction which further curriculum research should take.

Examination of the way in which the problem has been approached in Sweden provided background information for the study. The section which follows is a summary of the information given in the handbook for Swedish teachers. The need, the task, the problems and the methods presented in the handbook form the skeleton for this brief review. A report of the survey forms the second part of this article.

Sex Instruction in Swedish Schools

Sex instruction is compulsory in Swedish schools. In 1957 the *Handbook on Sex Instruction in Swedish Schools* was published in English by the Royal Board of Education. Educators in many countries have used this reference when attempting to plan similar programs. It was helpful to the writer in designing the questionnaire used in the study. Specific factors influenced the Royal Board of Education in instituting the program in Swedish schools.

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The Need

Swedish educators justify the inclusion of sex instruction in the school curriculum on the grounds that it is essential for social training and that the subject matter itself is of great educational significance. Teachers think the best solution would be for children to be taught in their own homes. However, they realize that parents often lack adequate knowledge themselves, do not recognize the need for such education, or may have marked inhibitions and thus be incapable of establishing rapport with their children so they can converse on this topic.

Today there is a great need for sex instruction in the upbringing of children. Society confronts young people with great difficulties of adjustment. Proper school instruction at the right time could make a significant contribution to the protection of young people by imparting clear information and rules for behavior.

It is the opinion of Swedish educators that children are reluctant to ask questions on the subject of sex, but that questions about sex require an answer whether they are asked or not. Young people need protection against the kind of teaching which (a) produces shock and guilt feelings or (b) reduces their resistance in a critical situation. It should provide a safeguard against abnormal individuals. For older children instruction can be a preparation for parenthood, thus providing for the individual important training for his role in society.

The Task

The task of the school is defined as follows:

1. To provide a unified course of instruction on sex which pays due attention both to society's demands on the way an individual lives and to the good of the young people themselves, by helping them so that sexual development may occur as naturally as possible, and so that children will have respect for it.
2. To give biological information and to impart knowledge in a manner that will help in the molding of ideals and the building of character.

The Problems

The problems involved in carrying out the above task and in following the suggested method as outlined in the Swedish handbook are listed below:

1. Suiting the teaching material to the pupil's level of development.
2. Giving lessons with tact, judgment and sensitivity.
3. Preserving as an asset the natural shyness of youth's attitude toward sex.
4. Keeping in mind the intimate effect of sex on the formation of ideas and moral attitudes.
5. Ensuring that children leave school with enough knowledge of (a) what society demands of them as citizens, (b) the broad outlines of norms which govern the way people live together in a civilized community and the consequences of following or not following them, and (c) the obligations which ac-

company sexual relations between a man and a woman.

6. Helping children to organize leisure activities and to develop healthy interests.

7. Avoiding the appearance of passing judgment on those who have not followed the advice given in school. The school stops at giving rules for socially responsible conduct and does not serve as a court in judgment.

8. Deciding when to begin the instruction, how to organize it, and who will teach it.

The Method

In Swedish schools sex education takes place in conjunction with nature study and geography classes in the lower grades, and in biology, history and religious knowledge classes in the upper grades. Instruction begins in the first grade as soon as the teacher feels that she knows the pupils well enough. For many Swedish children this is the first contact with a group of people outside the family circle. Thus it is important that they be given correct information before they have an opportunity to hear that which is erroneous. The classroom teacher gives the instruction. (Specific lesson plans are provided.) This is deemed advisable since she is trained to deal with children and accustomed to them. Moreover, she is able to fuse sex education with other subjects.

Common instruction in the natural classroom setting without segregation by sex is recommended. It is suggested that teachers may feel more comfortable with segregated groups for some topics. However, it is emphasized that both boys and girls should receive identical and adequate knowledge of each topic, since both sexes must be prepared for the task of being parents and teaching their children. When a teacher feels incapable of teaching about sex a colleague may exchange classes for these lessons. There may be other exceptions also. For example, in one school girls in vocational courses were instructed by a female doctor.

The Study on Sex Education in British Columbia Schools

The study was an attempt to find out from teachers and parents the following:

1. Should sex instruction be given in the schools?
2. At which grade level should instruction begin?
3. Who should give the instruction?
4. How should the classes be organized?
5. What instructional materials should be provided?

The Research Instrument

A questionnaire was designed in order to elicit responses related to the five questions under consideration. Explanation and description of possible choices were not included since the purpose of this survey was to find the general areas in which more concentrated study would be possible.

Subjects

Teachers enrolled in four summer school classes at

the University of British Columbia in 1963 participated in this study. These classes included: (a) both male and female members; (b) teachers from a wide range of rural and urban areas; (c) teachers at all grade levels; (d) teachers with varied length of experience, and (e) teachers of varied ages.

Responses of student teachers who had not yet taught were eliminated from the analysis. Nor were incomplete questionnaires considered. (Fifty-two responses had to be discarded on the sole omission of 'age.') The final sample totalled 197 teachers.

A second group of subjects consisted of mothers enrolled with their children in a regular school class at the University of British Columbia in 1963. This group represented the Vancouver area only. Twenty-eight of the thirty parents filled out complete questionnaires.

Analysis of Results

Question 1, 'Do you think there should be a program of sex instruction in the school?'

An overwhelming majority of teachers, 182 of the 197, were of the opinion that sex education should be taught in the school. All secondary teachers approved. Seven males who disapproved taught intermediate grades; the eight females who disapproved were four primary and four intermediate teachers. Of the 15 teachers who gave a 'No' response the split was fairly even in all categories—approximately one-half urban, one-half rural; one-half male, one-half female; one-half 30 or under, one-half over 30; and one-half with more than five years of experience, one-half with fewer than five years.

Respondents entering a 'No' response were not asked to complete the rest of the questionnaire but were asked to state reasons for their response. These will be discussed later.

Question 2, 'At which level should this instruction begin?'

In all categories except primary most teachers indicated that the intermediate level was a desirable beginning place for instruction. At the primary level more teachers favored beginning at that level. A total of 149 teachers placed the starting point for instruction in the elementary grades.

Question 3, 'Should sex instruction form a separate curriculum area?'

A total of 121 teachers preferred to have the topic included in one of the regular classroom periods. Health and Personal Development was suggested 84 times. Science and guidance were also frequent choices. The complete data indicated that only in the case of males in intermediate grades with over five years of experience did a separate curriculum area receive more votes than inclusion in a regular class period.

Question 4, 'Who would give this instruction?'

Response to this question was not as consistent as that to other questions. In general, teachers thought

that either (1) the classroom teacher (2) the school nurse or physician or (3) a combination of the two should give instruction. In most categories responses were distributed fairly evenly among the three possibilities. Rural, young, primary, and secondary teachers showed a slight preference for instruction by the classroom teacher. Intermediate teachers showed stronger preference for instruction by a nurse or doctor. Instruction by a special teacher was recommended in only 31 cases.

Question 5, 'How to group for instruction?'

A majority of teachers felt that children should get some instruction in mixed groups and some in groups segregated according to sex. In all systems of classifying subjects this was the predominant opinion. Second ranking opinion in all classification was 'only with members of the same sex.'

Question 6, 'Should boys and girls receive the same information?'

Of the 182 teachers, 120 indicated that students of both sexes should receive similar information.

Question 7, 'What assistance should be provided for teachers giving the course?'

Respondents favored special classes for the classroom teacher if he must give instruction. A handbook for teachers was also considered valuable. Male teachers and secondary teachers indicated a desire for a student textbook. Various combinations of the suggested alternatives accounted for the remaining choices. Some teachers indicated that the classroom teacher should *not* teach sex education.

Question 8, 'Check the areas which you think should be covered in sex instruction.'

A total of 130 teachers recommended that course content include biological, sociological, psychological and moral aspects. Of these, 82 would also include preventive advice and guidance.

Parents were in close agreement with teachers on all questions. However, they showed a stronger preference for instruction by the school nurse or physician.

The final question (No. 9) invited the participants to comment on their reasons for their choice in question 1.

Teachers who answered 'No.'

The following reasons were noted by teachers who did not think that sex instruction should be given in school:

1. It is the responsibility of the parents.
2. Each child should be instructed personally.
3. Instruction should begin before school age.
4. This area is too explosive for the school to handle.
5. Parents would object, and criticize teachers.
6. Teachers are not qualified.
7. Other curriculum areas need to be tackled first before we concern ourselves with sex.
8. An inadequate program could be instituted as a compromise, and this would be undesirable.

9. The implications of such action are far-reaching. If the school is to assume responsibility through parental default, then there would be no end, with medical care and housing also becoming the obligation of the school.

10. The school should provide classes in sex instruction for parents, perhaps through the P-TA. This would enable parents to teach their children.

Parents who answered 'No.'

Parents thought that sex instruction should not be given in the school for the following reasons:

1. It is the parents' responsibility.
2. Parents can give instruction at the most appropriate time.
3. Individual instruction is necessary and the teacher cannot possibly give this kind of attention.
4. Parents and the family doctor should co-operate in the instruction.
5. There should be books on sex prepared for parents so they can instruct the children.

Parents who answered 'Yes' made no comments.

Teachers who answered 'Yes.'

Reasons given by teachers for wanting sex instruction in schools are summarized below:

1. *Parents:*

(a) do not do an adequate job at home; thus children get erroneous, inaccurate information from outside.

(b) are too incompetent, indifferent, uninformed, or embarrassed to instruct their children in sex.

(c) prefer to have the school do it.

2. *The School:*

(a) can give accurate, reliable information.

(b) has access to more adequate teaching materials.

(c) can set up a sequential development program.

(d) can provide a wholesome presentation which will develop healthy attitudes and relieve fears and anxieties.

(e) can help remove tabu and mystery by including sex instruction as part of the school program.

(f) can provide a setting in which children can carry on discussion with their age group. This helps children to realize that they have common problems.

(g) Health and Personal Development as now taught, is sometimes poorly handled.

(h) It was suggested that mothers and daughters and fathers and sons attend lectures by specialists, when the girls reach the fifth or sixth grade level; the boys, the eighth grade level.

3. *Social Aspects:*

At present

(a) The child tries to get information anyway through any channel and is often forced to resort to adverse sources of information.

(b) Problems of overpopulation, illegitimacy, early marriages, teen-age pregnancies and divorce are prevalent to a high degree.

(c) The church as a social agency does not handle

the problem adequately.

4. *Instruction will:*

(a) Provide through knowledge protection from deviates.

(b) Eliminate curiosity and experimentation.

(c) Develop a realistic attitude toward birth control and abortion.

(d) Lead to less emphasis on early dating.

(e) Change society's attitude that sex is something bad, ugly, and not to be discussed to one in which sex is viewed as a natural process.

Conclusions from the Study

1. Both parents and teachers recognize that sex instruction for children is at present inadequate.

2. They also realize the critical nature of the problems which arise as a result of lack of information on the part of young people in society. Fear, misunderstanding and ignorance must be replaced by respect, understanding and knowledge in this area.

3. Parents advocate the inclusion of sex instruction in the school curriculum and teachers are willing to assume responsibility for this instruction if they are assisted by doctors and nurses, provided with special training themselves and given a handbook of instructions as a reference and textbooks for students in secondary schools.

4. The inclusion of sex instruction at the intermediate level at the latest is deemed advisable. This should form a part of the whole school program and be integrated with other subjects, preferably health and science. Moreover, a developmental program which follows a carefully planned sequence should be instituted.

5. Boys and girls should receive identical information in mixed groups where possible or segregated according to sex for some topics.

6. Information should be presented on biological, moral, psychological, social, guidance and preventive aspects of the subjects. (Some respondents indicated that the last two aspects mentioned should not be included.)

Recommendations

The following recommendations are presented on the basis of this introductory study:

1. A guide for a planned program in sex instruction in B.C. schools should be formulated.

2. Comments of respondents in this study could be used to outline the need and the task.

3. Further study will be necessary in order to design course content and to order it sequentially.

4. Knowledge of the results of this pilot study and of the already established Swedish plan could be used as a starting point from which to move forward in our planning for British Columbia.

5. Future researchers should use as representative a sample as possible and should include students, parents and teachers.

Students and Spoonfeeding

LEONARD H. FREISER

The author, chief librarian of the Toronto Board of Education, in an article entitled 'A Workable System of Information Retrieval,' described the 'revolutionary' system his library uses for providing students with photocopies of information they want. The philosophy behind the service is that students should spend their time and energy working with information rather than in trying to find it.

Mr. Freiser stated that insisting that students find their own information reflects the outlook of librarians rather than the needs of the students. Moreover, today's system makes mutilation, theft or plagiarism of library material profitable to students.

The original article precipitated a storm of controversy. The following article is Mr. Freiser's reply to his many critics. It is reprinted from the September 1963 School Library Journal.

MANY YEARS AGO I spent countless hours of my childhood in the libraries of New York. I cannot use that hackneyed term 'discovery' to describe what books and libraries meant to me. I expected to find books like those of MacDonald and Milne even though I had not previously known of their existence. Reading them was like returning to a place one knows but can't remember. It was a time of poetry, green mansions and new ideas.

Reading still has this meaning for me; poetry and ideas justify the writing of books. We send messages by telegraph, visit far-off places by television, calculate and itemize by computer; but only books can give us poetry and those abstractions which require verbalization.

Later, as a teacher of music (before my library days), I discovered how many people substituted verbalizations for musical experience. They could discuss the fugue, Count Esterhazy and the like, but were unable to be moved by the supra-rational intensity of a Bach cantata or the G Minor of Mozart. I

met people who did not read for poetry and ideas but to be informed. They did not read but read 'about something' and yet all the while they thought that they were reading—reading books.

Later still, as a member of the library profession, I was disheartened by the high valuation my colleagues in the public library gave to nonfiction circulation as compared to that of fiction. 'How to make a fast buck in real estate' was apparently more important than the Alexandria Quartet. It was there that I first met young people who came to the public library not to read but to do 'research.' And what a charade this was: the copying or rewriting of encyclopedias, the urgent phone call for some titles for a bibliography due the next morning—the general frenetic waste of both the library and the energies and imagination of the student.

Students, if not the teachers, placed the greater premium on getting, rather than evaluating, the information. And, of course, there were the usual complaints of mass assignments depleting the limited resources of the public libraries.

Over 10 years ago we were crying for people to come and use our libraries and today we are crying because they are. Over 10 years ago our biggest concern was with that mass not using libraries, and today we are faced with a mass of students who are. And it would appear from the summary of the recent Conference Within a Conference that we must now have a national training program so that all of our young people can become minor-league librarians in order to get at information they need. A truly pre-crustean solution: cut the patron to fit the library.

What has happened to our original idea? What has happened to the reading of books, to picking up a fine book; yes, even to sniffing its binding, admiring its type, caressing its paper; what has happened to all of this? Where is the poetry? Where are the ideas? The teaching of library skills to children, the emphasis on 'research,' has debased not only the

printed word but librarians themselves, and has caused many of our young people to forget the joy of reading not for research, not for information, but for the ideas of people who know how to write.

It is from this background that we developed Toronto's information retrieval service for students. We wanted 'research' to be only a means to an end. We wanted to save for the students the time and energy necessary for real reading. So the program was established to provide students with the information they require, of a quality they deserve—literally placing into the student's hands articles, books and sources from all media in response to his request for specific information.

The philosophy underlying this program is now a part of our Board's formal educational policy. We are gradually working towards the day when the searching for material requested by all students will be done by the library staff. The search service, now provided for several thousand secondary school students, proceeds from the student request to the school library staff to the Education Centre Library which is the heart of Toronto's information and library system. Professional personnel search for the material and present the student with Xerox copies of articles, books and other materials, plus a bibliography.

Quality of Papers Improved

We are developing collections and services to encourage individual browsing and reading for pleasure—free of the artificial constraints of 'research.' Our teachers have the opportunity to read current material in their own field. We are developing in students a 'public' who will demand and support good information and readers' services. We hope to provide models and incentives to attract the best brains we can use for true professional work. We are trying to make it possible for students and teachers to meet the great demands now made on their intellect and imagination by individualized instruction programs.

One of the most important results of the program so far is that the quality of the papers written by the students now receiving this service far exceeds any previous work done by equivalent groups. We are beginning to understand that we have underestimated the capacities of our youth for intellectual work.

Jerome Bruner has shown that students may study what we now consider advanced subjects at a very early age and that the information requirements of young people are far more complex than we thought they were. Our students should be able to have the information they need—our job is to provide it. Then our students may return to the book as book; to again approach the library for poetry, for ideas and for those valuable hours of browsing through a rich collection.

Our students work closely with their teachers to develop their ability to frame questions. There is no

limit placed on the scope or frequency of questions from any one student. The school librarian, having already searched her own collection for the desired information, is the person who phones in the request to the Education Centre Library. The student receives complete articles, books and other records in addition to a covering bibliography. Our secondary school students start with more reading and other material than most university students end up with.

Although young people work harder in this program than they would in the traditional plan (they have access to and are held responsible for more material and material of higher quality), we have found that our students are literally awakened by what they receive. They had not realized the extent and the variety of the sources of information. In many cases the clarity and honesty of original sources are a refreshing change from the journalistic clichés so frequently found in *Harpers*, *Atlantic*, *Saturday Review*, and company, and from the blandness of that prime source of 'research'—the encyclopedia.

Direct Contact with Experience

We must start with education—the conditions necessary for learning—if we are to understand where we, as librarians and educators, are going. As a result of the work of such people as Buckminster-Fuller, Trump, MacLuhan, Bruner and Florida's Bob Gates, students today are increasingly being brought into individual direct contact with experience. We are learning that although new directions in communication and education are intimately related to electronic and space technology, we must provide a basic philosophy and prototypes of programs to which this technology may be adapted. In this light our program is a beginning—an exploration of the optimum conditions for learning and communication.

This is the toughest program that students and professionals can possibly face. It requires thought, not busy work; creativity, not conformity. It argues for the rethinking of the logic and form of the varieties of knowledge, and it obviously calls for massive research into the philosophy and technology of communication. What ECL now does with Xerox 914's, telephone, telegraph and the rest may soon be done by Telstar, computers and other still unborn devices. Technology unsupported by both a philosophy and a program degenerates into gimmicks; technology ignored by the professionals in the direct line of its fire develops a new corps of professionals displacing the old.

Neither the loud, unsupported claims of gadgeteers nor the fundamentalist cries of coddling and spoonfeeding should blind us to the fact that we live in a time of extreme change and of infinite possibility.

Mechanical technology extended our senses and muscles and our strength, but it also led to compartmentalization. Its characteristics are repetition, regularity and predetermined motion. Electronic

technology—today's revolution—extends not only our senses but our minds and our position in space. The student has the world's resources at his call and his thought processes can leap forward at tremendous speed with the extension of his premises and analyses through electronic circuits. With Telstar we are able to join expeditions rather than dig out old copies of the *National Geographic*. On the oscilloscope screen of a computer we can learn and directly test our knowledge of mechanics.

We should not forget that much of what we call 'information' is only information about information. We forget that the time factor is part of information and that the middleman processes of publication, storage and retrieval frequently distort or freeze the realities we seek. These processes are the best we have had available but they are an anachronism in the face of the possibilities we now have of direct communication—the tapping of information at source. In communicating we must learn to close the gap between the source of information and the consumer.

We now have the technology with which we can afford to return to the Socratic dialog. No longer

are we living in a compartmentalized world, both in the intellectual and the geographical sense, but, as MacLuhan has pointed out, we are becoming residents of a global village. Our experience of the world can today be as rich as the experience of the village was for our forebearers.

Seen in this perspective the Toronto program is only a beginning, a prototype for a total system of communication allowing students and teachers access to experience and ideas.

I have always considered librarians working with children, in schools and in public libraries, to be one of the most dedicated and truly knowledgeable groups in our profession. Their intimate knowledge of books and their keen interest in young people has resulted in some of the finest library service in our time. We must build on this invaluable foundation for without it any projected service to children would be sterile. These attitudes and services did not just come to be but were developed to meet the educational realities of the 19th and early 20th centuries. If our library services are to continue their validity they must meet the educational realities of today.

School Vandalism Eliminated

A major worry of many school boards is the high cost of vandalism. Thousands of dollars a year must be spent for replacement and repairs necessitated by thefts and property damage.

In Reading, Ohio, school officials, working with the city's police and fire departments and an electronics distributor, have solved the problem with the installation of a monitoring system which connects the high school and three elementary schools to the police station. The system has eliminated vandalism since its installation in 1962. It is sensitive enough to pick up the sound of airbrakes on a truck outside, and can monitor a train whistle in the distance. It relays to the police the first clink of a crowbar on a door or window.

The system is part of the schools' regular communications systems, each of which is operated from a console in the school office. After

school the system is turned off and the vandalism system automatically comes on. Each of the 250 speakers located throughout the four schools is reversed; each becomes, in effect, a microphone. Sounds picked up by the unique intercom system are 'zingged' out over wires to a 'noise-operated relay' and an amplifier at the police station.

The desk sergeant keeps the volume turned down, but a bypass circuit in the noise-operated relay activates a buzzer and an indicator light, designating which school is 'reporting' via one or more of the classroom or corridor speakers now acting as highly sensitive monitoring microphones. The sergeant turns the buzzer off, cancels the light, and 'volumes up' for close listening. He often hears nothing—a clap of thunder or an automobile horn has activated the system. But if he hears one door open or close,

one whispered word, or one foot-step, the prowlers are in trouble.

Reading's fire department has a separate 30-watt amplifier with a bell-tone oscillator operated by push button, the signal from which is sounded over speakers installed in the homes of the city's 25 auxiliary firemen.

The city's fire inspector reports: 'The two systems are working out very satisfactorily for both departments. The vandalism system is so sensitive you can hear a basketball being dribbled in the courtyard outside.'

Reading's high school principal says: 'Since the system was installed, there has been no vandalism whatever. By completely curbing thefts and breakage our schools are undoubtedly saving taxpayers hundreds of dollars a year.'

The equipment was supplied and installed by the DuKane Corporation, St. Charles, Illinois.

Written exams inevitably bring about undesirable teaching and studying practices. The examinations have become masters rather than servants of the educational process.

Oral Examinations Are Far

IT IS ALWAYS during examination time, while pacing the aisles of the gymnasium watching tense faces, that I think of my own school exams and compare them with the ordeal our high school students go through four times a year. Invariably I come to the conclusion that the system of education I went through, even if more exacting, was fairer to children, because it was based on sounder psychological principles. We had no formal exams comparable to the ones our youngsters are subjected to, until the end of Grade 12. True, that last exam was formal and very rigorous, but up to then, for twelve years, we were graded, promoted, failed or expelled from school on a system of rather informal and predominantly oral examinations and evaluations which, in my opinion, was not only fairer, but also more educative than the system of written examinations.

This matter was brought up in the staffroom of our school and hotly discussed. In the course of these discussions it occurred to me that it might be of interest to teachers not familiar with European education to hear something about its basic practices, and not only for the sake of curiosity. After all, we learn by comparing and contrasting. Seeing a thing in comparison with another amounts to seeing it from a different angle, an experience which always opens new vistas and may end by supplying new ideas.

My statement that the system of education I went through was based on sounder psychological principles than the system in which I am now teaching is not meant to be a condemnation of the latter. Judgments of this kind cannot be passed without taking into account a multitude of factors which affect the efficiency of educational systems. I do believe that the former system is sounder intrinsically, but not necessarily better under any circumstances and regardless of the social context in which it operates. However, the primary purpose of this article is to provoke an exchange of ideas which, I hope, will contribute to a

better understanding of the *function* of examinations.

I shall start by pointing out what I consider to be sound psychological principles. If the reader agrees with my choice, he may use these principles as criteria to evaluate the practices of the two systems under consideration.

I think we may say that, on the whole, all schools of psychology admit they know neither what learning is nor how it works. (If they knew, we would not be forever discussing methods.) On the other hand, there seems to be complete accord among the psychologists on certain conditions which, all other things being equal, make learning easier.

These conditions can be roughly summarized as follows:

1. *Motivation*, the will to learn, which is the most important of them all. As the proverbial horse taken to the water will not drink unless he is thirsty, so the child sent to school will not learn unless he is motivated.

2. *Taking the facts to be learned in comparatively small and digestible doses* (not necessarily in equal amounts, knowledge being by nature uneven). As Locke said: "The great art of learning, is to undertake but little at a time." This requirement calls for steady work habits and is contrasted with cramming, which, as all psychologists agree, does not produce lasting learning.

3. *Repetition or revision*. We retain information by making use of it. To be remembered (and assimilated), ideas must be frequently manipulated mentally and *expressed* in one's own words; facts must be used in various contexts. To be useful, repetition must not be done purely mechanically.

4. *The knowledge to be learned must make sense to the learner*. A learning problem must be seen as a whole to make sense. Particular items to be learned must fit into the previous knowledge, whether by answering a question of interest (intrinsic or extrin-

Better than Written Ones

GEORGE DUBOKOVIC

sic) or by supplying a more meaningful concept. From this principle we may infer that the more knowledge a student has, the more his capacity for learning grows.

All this seems to be rather old hat, as indeed it is. The saying *Repetitio est mater studiorum* is at least 20 centuries old. The educational psychologists did not discover these principles; they investigated earlier rule-of-the-thumb teaching methods, and, having disentangled them from the spurious ones, supplied proof of their soundness.

The most striking difference between the Continental systems, on one side, and the North American systems, on the other, is the way in which learning is assessed. Our system depends exclusively on the written examination, while the Continental systems favor—though not exclusively—the oral examination. The exams being the differentia, I shall refer to the two systems under consideration as the written exam system and the oral exam system. All the other differences between the two systems stem from this basic one.

The main point I wish to make is that the written exam system, as applied today in our province, inevitably brings about certain teaching and studying practices which are not conducive to conditions favorable to learning.

There is nothing wrong with written exams by themselves; they are a valuable and a most obvious means of assessing progress in certain subjects, as long as they remain servants to education. With us, however, written exams have become masters; education is subservient to them. The whole machinery of education is geared to fit into the scheme of written examinations. These examinations have supplanted all other modes of evaluating learning in all subjects (from mathematics, which suffers the least, to modern languages, social studies and history, which suffer the most); they have become the sole criterion for grades

and promotion; they have relegated the teacher to the status of a marker. Inevitably the teaching, and even more the studying, have adjusted themselves to the tyranny of written examinations—to the detriment of both. *The study of how to pass exams has superseded the study of subjects.*

On the other hand, school systems which stress the value of oral exams have remained elastic; they use all methods of examination, including composition and “objective” tests; the latter, however, in moderation and only for subjects that lend themselves to that type of exams.

Characteristically, in the oral approach the examination has retained its two original functions: diagnostic and educative. The two functions complement and reinforce one another; weaknesses are discovered and remedies applied on the spot while the child is still concentrated on the problem. The following is the usual procedure.

At the beginning of every period the teacher calls one or more students in front of the class and questions them on the last lesson, or on any topic taken up to that day. While the examination is in progress, books, notebooks, even pencils are put away; the desks are clear. The first questions are always broad ones, involving a sequence of events or facts (e.g., “Tell me all you know about the French Revolution,” or “Explain the Theory of Ionization.”) and never particular ones (e.g., “What happened at Varennes?” or “How many electrons are there in an atom of S^{2-} ”). The student is expected to tell all he knows about that topic in a logical (or chronological) order. The teacher helps when necessary, giving hints, correcting obvious slips, or by asking questions to elicit clearness. If the narration proceeds satisfactorily (i.e., if the student shows knowledge and ability to express it) the teacher may let him finish; he may ask for details (to assess the depth of knowledge), or put a new question.

The author teaches in J. Lloyd Crowe Senior Secondary School, Trail.

Children are naturally interested in the performance of their peers. Moreover, the teacher expects the class to follow the examination and directs side questions to anyone who does not seem to be alert. If a student fails to answer such a question he is called in front of the class and examined thoroughly.

This approach recognizes that the natural order in the acquisition of knowledge is from the whole toward the detail, and expects students to proceed in that order. Day to day examination provides repetition and revision; it also provides occasion for paraphrasing the acquired knowledge into the student's own active vocabulary, as well as an opportunity of checking and improving the understanding by listening. Students are thus expected to be mentally present and watchful, and most of them eventually are.

Data Collected all Year

Evaluation takes place on the spot. The teacher enters marks and dates in a special book, together with some notes, for every performance. In fact, from the beginning to the end of the scholastic year, the teacher collects data to build an opinion of the student's work. Marks are entered in the little black book whenever a change in performance, for better or for worse, takes place. To make up for a poor performance, the student must be ready to speak on any part of the material covered, especially the part in which he had failed. The same applies to students who have been absent. At the end of the term the teacher has several marks of oral examination for each student and, in case of mathematics or languages, marks of monthly written class tests or compositions. Moreover, he has, throughout the year, been forming an opinion of the student's work habits. On that basis he *evaluates* the student in terms of conventional grades, which are made final and entered into the report card only after consultation with the other teachers of the same student. The teachers of the same class, known as the Class Council, meet at regular intervals to discuss teaching and disciplinary problems.

It must be noted that the term *evaluate* and not *measure* is used. This method does not lend itself to ranking of students. Even though common written examinations in certain subjects are administered to whole grades, their primary purpose is to serve as guidance to the teachers. Ranking, in most of the countries where the oral method is practised, is considered outside the scope of education proper.

By and large we cannot expect children to study school subjects systematically out of love or curiosity. Motivation, the most important single factor in learning, remains, alas, also the most elusive. That is why school and society have to provide incentives—grades, prizes—or less pleasant alternatives. Yet even

the student who lacks an intrinsic motive for learning does not wish to appear an absolute dunce when interrogated in front of the class. One learns when one wishes to learn (within limits of individual differences, naturally) and one wishes to learn when it matters. Oral examinations are educative not only for those who are being examined, but also for those who follow the examination from their desks. Apart from repetition, these exams supply the opportunity of seeing how knowledge is applied, under a watchful teacher who corrects misconceptions on the spot. By contrast a written examination is not educative; a mistake, once written, remains only more deeply impressed into the child's mind because it was written. The sight of a marked exam, days later, rarely helps to erase that misconception. It is not a matter of chance that we find the same mistake appearing over and over again on written tests. By the time papers are handed back, the urgency to learn is gone; the student, conditioned to statistical grading, now focuses his attention on recounting the score, calculating percentages and comparing his mark with his neighbor's. (He never did have the opportunity to compare his *knowledge* with his neighbor's.) In oral exams slips are quickly recognized and distinguished from ignorance. On written exams a slip merely frustrates the teacher while the educative opportunity it offers remains unused.

Students Study Consistently

Knowing that every performance counts, and that he may be questioned any day, the student in the oral exam system is compelled to study each lesson before the next one. Day to day learning in digestible doses (i.e., good work habits) prepares the student to understand and therefore to learn the new lesson faster and better. By contrast, students in our system tend to work intermittently. Conditioned to written exams and to the idea that the only valid basis for their grades is the result of a duly proclaimed and heralded test, they tend to view the period between exams as a period of repose during which it is quite legitimate to do little in the matter of study. The result of this attitude is that students tend to come to school unprepared and therefore unable to follow profitably the teacher's explanation of the new material. As the exams approach, the interest in study revives, but for many, too late. Some fall behind to the point where they cannot profit by listening to the teacher. We understand and retain in accordance with our previous knowledge. One cannot understand the end of a story of which one has missed the beginning and the middle. The result is a tendency to absenteeism before the exams, prompted by the idea that the only way to catch up is to stay at home and cram. If any learning at all takes place during these feverish days, it is rote learning, which evaporates even faster than it was acquired.

We cannot blame children for being improvident;

it is a characteristic of childhood which a good system of education should take into account.

Expecting the students to tell the whole story—be it in social studies, science, grammar or mathematics—the oral exam system stimulates them to make an effort to understand. With the teacher's encouragement and coaching the child learns, as he tells the story, how to organize the knowledge he possesses and how to present it coherently. By meeting the teacher's discrimination between essentials and accidentals, the child comes to recognize a hierarchy in knowledge, i.e., that there are certain more important, basic items of knowledge (which he must know in order to pass) and items that are less important (which he must know if he wants a higher mark). By contrast, written exams (especially the so-called "objective" ones), by ignoring the truth that knowledge is a structure and not a conglomeration of isolated bits of information, encourages the learning of particulars. Judging by answers one gets in objective exams, one often wonders whether any understanding at all has taken place. One less important detail may be correct, while another essential to the meaning of the story may be hopelessly wrong, yet each is worth a mark. There is no way of finding out what is going in a child's mind except by asking—yet we tie ourselves solely to the written word. Objective marking not only ignores the hierarchy and the quality of knowledge, but is also unable to take into account the degree of ignorance—one mistake is like another. Finally, objective exams and objective marking encourage reckless guessing. A favorite device of many poor students is to write the same answer to several questions, hoping that in one case it will be correct.

"Subjective," the so-called "essay-type," exams are little better. Except in the case of good workers, who would have learned something from the experience, science tend to be badly organized and difficult to evaluate honestly. One has the feeling that in front of a helping teacher the same child with the same knowledge would have produced a coherent story and would have learned something from the experience. We keep complaining that our students do not know how to write essays, but we continue to ask them to do something for which they have not been adequately prepared. We expect them to fly before they have learned how to walk.

Every term, having marked hundreds of social studies essays, I conclude that historical essay writing at the senior secondary school level is not educative, that it does not contribute to learning, that it only

confirms misconceptions and, even worse, that it destroys critical ability. For the time being, I think, essay writing should be confined to English, and to free topics, where facts will not interfere with the child's fancy or with his attempts at creative writing.

The oral exam system is in use, with minor variations, throughout the whole of continental Europe and in those non-European regions which came under the influence of France, Germany or Russia. Given an ideal teacher-student ratio (1/25 or 1/30), the oral system is superior to the written exam system in imparting both knowledge and understanding. Yet it does not work equally well everywhere. To be successful, it must have the backing of public opinion, especially in view of the position of responsibility which teachers hold in such a system.

In the oral exam system teaching is a personal affair. To achieve its aims, this system depends to a great extent on the intellectual contact between teacher and learner. This relationship, conceived as a transaction between an experienced and knowledgeable adult and an inexperienced youngster, calls not only for professionally prepared teachers, but also for smaller classes. One can say that the efficiency of this system decreases as the number of students in a class increases and as the teacher's total workload increases. Indeed, some Continental countries, with an acute problem of mass education at hand, have experimented with some features of the written exam system.

I think that a move in the opposite direction would be desirable in our province; indeed, it is overdue. That we examine even foreign languages with exclusively written exercises is ridiculous.

Every subject, including mathematics, would profit from an oral approach. An improvement in understanding and in organizing knowledge is bound to take place when children are expected to narrate, not just to answer questions.

No doubt even a modest concession to the spoken word would tend to upset some established practices in education. Qualitative knowledge does not lend itself to "measurements"; it cannot provide "objective" marks suitable for statistical manipulation, on which we depend for our promotional criteria. However, I am not suggesting a drastic reform of our educational system; just an open-minded inquiry to establish whether or not it would be possible, given the facilities at our disposal and the climate in which we work, to grant to the oral examination some sort of an official status. Clearly this is not a problem that can be solved by figures, but only by the professional judgment of teachers.

BCTF Scholarships

Applications for BCTF scholarships for teachers for both summer and winter sessions should be in the hands of Dean Walter Gage, Dean of Administrative and Inter-Faculty Affairs, University of British Columbia, Vancouver 8, by March 15, 1964.

What Is a University?

H. KLYNE HEADLEY

THERE IS AN OLD 16th Century Spanish poem which tells of a donkey wandering through the woods. He espied a flute on the ground and in typical donkey-fashion proceeded to explore. He sniffed and blew first one end, then the other. Suddenly, by accident, he sounded a tone on the flute. Thereafter he bragged to the world that he was a flute-player.

In other words—trite but true—a little knowledge is a dangerous and foolish thing!

It is to this subject of knowledge that your attention is invited. First, what do we mean when we say, 'we know?' Second, where and how do we learn—and, why should we place value upon knowledge?

When one begins to reflect upon the question 'What is knowledge?', the usual parade of previous studies, definitions, and statements by others all come to mind. It is easy and certainly more convenient to review what philosophers said in their search for the answer to the question 'Is Knowledge Possible?' From Thales to Plato et al in Greek philosophy, the writings centered around the belief that knowledge was possible—through the senses. The skeptics took issue on the basis that the senses were unreliable. The early Christian philosophers taught their converts that knowledge was available only to a privileged few—to be dispensed only to those who accepted dogma. Philo and Plotinus disagreed, saying that anyone who led a good life had access to knowledge without intermediary human intercession. So the pendulum moved from extreme to extreme until today. Each generation has expressed through its thinkers some ideas concerning the nature of knowledge and its attainment.

Descartes, faced with the personal question of what he knew, said, 'I know only that I am!' Often quoted but seldom understood is a thought that knowledge is

Dr. Headley teaches in Lord Byng Secondary School, Vancouver.

innate, is within one's own consciousness or sub-consciousness.

How can one understand and respect others, their institutions, utterances and accomplishments without first understanding and respecting oneself?

President W. Allen Wallis of the University of Rochester, had this to say about undergraduates . . . 'they are an elite group. Given such students, our over-riding objective ought to be to develop individuality. *To Each His Farthest Star* might well be our motto if a fine one had not already been adopted by the faculty in 1851: *Meliora*, signifying devotion to perpetual processes of improvement rather than any absolute goals. . . . We want them to do more and different things than is expected of them, to be driven by their own inner expectation and standards.' The purpose of the university is 'to transmit to them some of the accumulated knowledge of the past, and to convey to them an understanding of the methods and—above all—the spirit of inquiry, of science, of scholarship, of learning.'

The second question, where and how to learn, sooner or later includes a school of some kind. Without sounding conceited, one might say to himself what he would not always say aloud — that he attends school to acquire knowledge and the understanding of how to use it.

Let us assume at this point that the best place to acquire knowledge is a university. This presupposes proper preparation throughout the elementary and secondary schools. One hears complaints that too many parents and their children aspire to university education. Without entering into this argument it is more to the point to define or attempt to define the function of a university, so — what is a university?

President Lowell of Harvard had this to say: 'A university is a storehouse of knowledge, for the freshmen bring so much to it and the graduates take so little away.'

We are prone to expound on what a university is *not*. This is easier than to say what it *is*. It is not a place where individuals are trained for purpose of minimizing frictions and frustrations. It is not on the edge of beautiful snow-capped mountains or by the straits—'notwithstanding the possible 'sermons in stone or in running brooks.' This is not to say that students will cease to sit by streams holding hands and learn about themselves. Neither is a university a place for brain-washing by deans to the end of conditioning reflexes for life in their Utopia.

Rather, a university is the institution for the imaginative acquisition of knowledge (*The Aims of Education*, by Alfred North Whitehead).

The kind of knowledge a university tries to nurture is the kind that retains its value in the face of changes. How important the university has been and is can be illustrated by taking a look at old European towns or cities. The oldest institutions are the cathedral and the university. Palaces and city halls may come and go, but the university lives on. Businesses rise and fall, governments and even schools appear and give way to change—but the university stands. The reason is that knowledge, the most important thing in the world, is somehow kept alive.

Complex societies cannot operate upon knowledge that has become common-place, which can be learned by rote or memory. Much of what is taught is in a state of flux or change and will be forgotten. This is not to say there are not truths of permanent value. Rather let it be said that what is thought permanent today may become trivial or ephemeral tomorrow—or by the next teacher to give a lecture.

Student Makes Decision

Creative learning—imaginative acquisition of knowledge, quoting Whitehead—has to do with assimilation and discrimination. A university in the best sense does not ask a student to copy, memorize or even believe what is taught, for much will be false or irrelevant. Instead, the student must himself decide for or against. However, one cannot pass judgment without understanding. How can one tell whether or not the water is fit to drink if a sieve is used? Assimilation first, then discrimination.

At this point one may ask how a student can set out on a voyage of criticism and self-expression with a blank piece of paper instead of a map. Facts are the substance and food on which the mind feeds. First, the student must develop the talent for finding and thinking upon things that may be true, honorable, just, pure, lovely, and of good report—to paraphrase St. Paul.

These facts must be subjected to question, analysis, observation, experimentation, criticism, revision, organization, invention and communication, all of which may explain why present knowledge replaced earlier ignorance. Our present knowledge, in turn, will be tested by criticism and found to be either

true or not, honorable, just, pure, lovely, of good report—or the opposite.

These skills or talents can never become perfect but they will not become obsolete such as might be the case with vocational skills. There are those who believe in a comfortable, safe society; this does not exist. Our society is unstable as it stands at the crisis of history. No skills today will give a sense of security, for there is no longer any security.

Not all students will excel to become Phi Beta Kappas, great inventors, or artists; however, the university must act upon the belief that the student is going to change the world by the way he thinks.

Universities are not storehouses of static knowledge. Whitehead says that 'knowledge keeps no better than fish.' Instead, the university exists primarily to develop skills to be applied with and for others and also for self-realization, for making discoveries and using discoveries made by others. Free and independent use of the mind on the most important problems of life—this is the essential goal of university education. A changing society must have this kind of education if it is to change wisely. The agitation for educational reform, the increasing appropriations for higher education both indicate a public awareness of the values of this kind of education. The cry is for new ideas with which to meet the changing world.

The investment society is making in education is a speculative one. There is no guaranteed product, no guarantee of uniform excellence. A stockholder in any business venture would soon sell out if the same uncertainty surrounded his investment. We may feel that the university is not doing the best job possible with the resources available. If so, what is the answer? The students, who later will be citizens, are responsible for the kind of university they think will do the job, and *they must help do the job*. Outside criticism is often unfair, based on uninformed and destructive reports. The university has a difficult yet extremely important role to play in society; its students must therefore help make the investment pay off.

What is Man?

So far the social aspects of education have been under consideration. Now let us turn to what Aristotle spoke of as 'intellectual virtue.'

In attempting to qualify the various activities of man, one uses the term 'good.' A man is a 'good' football player if he does well what a football player is supposed to do. A good teacher is one who teaches well, a good singer is one who sings well, etc.

In attempting to carry through this argument Aristotle finally came to man. What is a good man? To answer that he had to define what man is in order to find out what is 'unique and specific' about him. The perfection of these qualities would be 'human excellence or virtue.' 'All men by nature desire to know.' In part this defines what man is. Aristotle

said that man is a rational political animal. In discussing the social aspects of education it was seen that man must be trained to be a responsible citizen with a sense of justice, prudence and practical wisdom. However, man conceived as a rational being who wants to know gives reason for the existence of universities.

In this pragmatic society the very thought of gaining knowledge for its own sake seems antiquated and certainly impractical. But any attempt to thwart the desire to know deprives man of his unique talent. Not all will achieve such intellectual excellence that they will change society of the world. The Rembrandts and Beethovens are few indeed. But there is intrinsic

value in knowledge—for its own sake—which satisfies a basic human desire. The function of the university is to make this possible and even more, to encourage students to seek intellectual excellence for its own sake.

Finally, the university has a dual role. First, it must teach the young what older people already know. Second, through research by faculties, it must delve into the unknown. In this sense the university exists to educate its faculty. The teachers must teach themselves and also teach the students how to teach themselves.

Can we say, then, that the most important function in education at any level is learning *how* to learn?

The Challenge of Change

C. M. BEDFORD

THE MOST SIGNIFICANT characteristic of the atomic and space age is the increase in the rapidity with which discoveries in science follow one another. The resulting pressures on education and child welfare constitute the major source of the problems which bedevil our society.

The amount of scientific activity is doubling every ten years. Ninety percent of all the scientists and research workers who have ever existed are alive today (Auger, Pierre, *Current Trends in Scientific Research*, New York: United Nations, UNESCO, 1961 p. 15). In contrast, the scope of all activities not directly related to science is doubling only every forty years. Science moves on at an ever increasing rate of change; other human activities lag farther and farther behind. The strains and stresses of this cultural lag increasingly threaten the stability of our civiliza-

tion, and we walk every day hand in hand with the specter of atomic annihilation.

To express this general problem in somewhat different terms, it will be clear to any of us born prior to the First World War that our children are growing up in a world which differs far more from the world of our childhood than our world differed from that of the ancient Romans or Anglo-Saxons.

As if this cultural lag between the scientific and the non-scientific were not bad enough, there is a serious additional educational lag. The average period between the time when a new process is discovered and the time when the substance or apparatus produced by the process is placed on the market has been greatly reduced since the beginning of the century—from several years to a few months in some

cases (Auger, *op.cit.*, p. 18). In sharp contrast, the time lag from the discovery of a new understanding in learning theory to its general application to the classroom takes a generation. In fact, studies show that desirable practices based upon research results in education may take from thirty-five to fifty years to become widely used in classroom practice (C. P. Collins, address to CEA Annual Meeting, Halifax, 1961).

For example, it has been known for some time, as a result of the research of Penfield and others, that children learn a second language easily when they are very young—2 years to 6 years—and the longer the teaching of a second language is delayed, the more difficult it becomes to get the correct pronunciation.

'Children can begin to learn a second language even before they can read and write their own. This is the opinion of 20 experts from 11 countries who met recently in Hamburg to study the role foreign languages should play in primary education. The meeting, convened jointly by the UNESCO Institute for Education, and the UNESCO Department of Education, recommended that a second language should be taught in kindergarten.' (*Unesco Newsletter*, February 1963, Canadian National Commission for UNESCO.)

In Canada, both French and English are official languages. It would be of great value to Canada if our children were bilingual, not only from the standpoint of our bicultural heritage, but also because of the shrinking world we live in, and the importance of language to world trade and world citizenship. Nevertheless, the educational lag will probably have its way, and a generation elapse before we put into effect the findings of research in respect of teaching a second language.

Research in Education

This cultural lag in education can be overcome only by the massive application of methods of science to education. Our teachers-in-training must be saturated with the scientific outlook. From the very start of their training, they must be immersed in experiences which will produce understanding of research, the capacity to evaluate the research being done, and the ability in a substantial number of teachers to carry out acceptable research themselves.

Active research encouragement must come from the administrators in education—the principals and the superintendents of schools. In future their education must encompass a much more rigorous training in research procedures so that they can initiate and supervise research projects.

Support for research through general understanding, acceptance of research results, and the provision of sufficient funds must come from local school boards, from provincial and federal governments, and from parents.

Private enterprise in Canada invests huge sums in

finding the best way to sell to people things they never knew they wanted. Governments spend hundreds of millions each year on research in the physical sciences, in industry, in agriculture, and in the military services. But by contrast, so little is spent on educational research that it is not possible to obtain even an estimate of the amount.

People seem to agree that there must be changes in education. Just about everybody has proposals to make: team teaching, programmed learning, a second language for elementary schools, a revision of Indian-Eskimo education, the extension of family allowances (to keep more students in school for a longer time), new methods of teaching arithmetic and science, new methods of selection of students for universities, a shift system of high schools (involving extension of the school day, school week and school year). . .

However, where changes do occur, they seem to come mainly because individuals and organizations promote them, rather than because the changes have proven value. It is most important that education stop this 'flying blind,' this 'groping in the dark.' The method of science must be applied to education.

Research yields facts upon which to base decisions. It facilitates and increases the accuracy of prediction, thereby reducing the number and magnitude of errors made. It is an investment rather than an expense. Parents, teachers, administrators, governments—all need research help in solving educational problems.

Let us give to the development of our children's minds and characters more of the benefits of the scientific research we lavish on the development of better mousetraps, deodorants, automobiles and trips to the moon.

Teacher Training

Within the school system itself the quality of the teacher is the most important single factor in the education of our children. The Canadian Home and School and Parent-Teacher Association has been striving to attain for Canada a minimum of two years teacher-training past senior matriculation prior to a teacher's taking charge of a classroom. Australia has had this provision since about 1900. England requires three years. Most of the states of the U.S. now require four years. Most of the countries of Europe now require three years, except for nursery school teachers and some specialists. For years we have been the most backward of all the industrialized Western nations with respect to the length of training required for our teachers; we still hold this dubious distinction. Surely it is time that Canada began to take the lead with respect to teacher education. We can afford to do so; our standard of living is one of the highest in the world. We enjoy fine automobiles, but we sell our children short.

Mr. Bedford is President of the Canadian Home and School and Parent-Teacher Association.

Alberta is the only province which meets the minimum requirement of two years past Senior Matriculation. Substantial gains have been made, but in comparison with other Western nations, and in terms of the welfare of our children, there is still much to do. The tide has started to turn in the direction of the two year minimum past Senior Matriculation, but much remains to be done. There is no substitute for a first-class teacher in the classroom. No amount of rearranging grades within levels, of doing away with grades through streaming devices, of revising programs of study, of utilization of programmed learning and television, will do away with this necessity for top quality teachers. When we solve minor problems while leaving unresolved this major problem, we are deluding ourselves. Staffing all our classrooms with first-class teachers is an absolute and necessary condition for real progress in education.

School 'Drop-Outs,' Vocational Training

In Canada today about one-third of our children do not continue in school beyond Grade 8; about one-third drop out of school before finishing high school; about one-third complete some high school certificate and go on to post-high school training of some kind.

A large proportion of the unemployed come from the two-thirds of our youth who are cast upon the labor market, ill-prepared to cope successfully with life in Canada today.

In past years untrained youths were absorbed in farm work, unskilled labor, and so on. This state of affairs no longer exists, but we continue to treat the education of our boys and girls as though we still lived in the horse-and-buggy days. When a boy or girl can no longer cope successfully with life in school, he or she is simply cast out into the labor market. Society ceases to accept responsibility for such cast-offs—unless they get into trouble with the law, as many do. Thus we have the situation of increasing unemployment and increasing delinquency in an expanding economy characterized by increasing automation, and by ever-shrinking opportunity for the poorly-trained boys and girls.

In general it could be said that society must now accept responsibility for youth until they are gainfully occupied. This requires a drastic revision of our concept of the role of education in our society. It is no longer good enough simply to cast our less-gifted children into the streets as soon as they become a nuisance in the school system. Community work-life must become increasingly integrated with school-life. Commerce, industry, the distributive trades, retail trades, service trades, recreational services must work hand-in-hand with the educational system so that there is an easy and successful transition for our boys and girls from school-life to work-life. Educational agencies must take the initiative in this process; far more active planning and co-operation must take place

at the local level between school boards and employer groups of all kinds. The leadership must come from provincial departments of education, from appropriate federal departments of government, and from the Parent-Teacher or Home and School organization, local, provincial and national.

Federal Office of Education

Under the BNA Act jurisdiction over education is left with the provinces, yet who could say that expenditures such as those under the Technical and Vocational Assistance Act of 1961 do not exercise a strong influence over educational affairs? The total expenditures under this Act amount to more than 25 percent of the total of all expenditures in Canada in any one year on education. The Glasco Report cites an expenditure of some \$168,000,000 (including only \$47,000,000 for technical-vocational) by the Federal Government on education. This amounts to more than 10 percent of the total of all educational expenditure in Canada during that year. This expenditure is concerned with such matters as the education of Indian and Eskimo children, schools in military bases, financial support for universities and vocational schools, retraining of the unemployed, gathering of educational statistics, and the CBC educational programs. This expenditure is divided among many departments of government and many ministers of the Crown. It would appear to be most appropriate that there should be one federal minister and one agency of Federal Government to exercise jurisdiction over federal educational expenditures of this magnitude. Then the people of Canada and the members of Parliament would at least have clearly in front of them the picture of what goes on, and could better take appropriate action with respect to it.

At the present time, although the terms of the BNA Act may technically be subscribed to, in actual fact the Federal Government is intervening in education in a most substantial manner. The whole question of the role of the Federal Government in education needs to be studied most carefully.

Conclusion

We are parents who are striving to overcome the problems of change. This purpose impels us to attend Home and School meetings, to serve as officers of associations and federations, to act on committees, to attend conventions. All this we do voluntarily. There is no pay in dollars—in fact, any one of us is out-of-pocket as a result of his work in Home and School. We are 300,000 strong in Canada giving freely of our time and energy to help make a better world for our own children, and for children everywhere. Herein lies our great strength. But to be effective for the very difficult tasks which face us—to make our strength count—requires the best thinking and the greatest dedication we can command. I am confident we shall not be found wanting.

A Letter to David's Mother

A reply to Mrs. Renate Wilson's 'Letter to a Teacher,' in the September-October issue.

I am sorry a season has elapsed between your letter and mine, but at the time I first read your letter I was busy with 42 Davids and Marys. The strange part of it all was that I had already embarked on a program that I feel well answers the special plea you made in your letter.

Some years have passed since my daughters entered the middle grades and now I have a grandson attending Grade 1 and starting his journey on the road to learning. It is a never-ending road even for Grandmas, because the more one continues to learn the more one realizes just how little he or she knows. Perhaps this is the secret of eternal youth that is within our grasp, because stagnancy of mind does become age.

A class of youngsters becomes a teacher's family. The lady who lived in the shoe is now the lady who lives in a classroom trying to feed knowledge to all of her many youngsters. She knows she is incapable of giving each member of the family the amount of individual attention she would like to give. But she does try to inspire each individual to progress and to become imbued with a desire for knowledge.

The town in which I live is growing so quickly that my classroom family is now 44. But despite having so many, I plan to continue with the special program I launched in September, and that fits in so well with your plea.

For many years I have become annoyed at various meetings I attended as a parent. People just seem to sit and listen and contribute so little in the way of opinions. I have always enjoyed writing but have often felt inadequate in expressing my thoughts orally. This has not, however, stopped me from making comments, as my col-

leagues would readily admit!

Last summer I enjoyed an English 400 course at the University of Victoria. My choice for the necessary or inevitable essay was 'How I Would Attempt to Teach Creative Writing.' I felt my most important suggestion was much practice in both oral and written efforts by all pupils. When school reopened in the fall, I determined to put my own suggestions into practice.

I want my pupils to be able to think independently, to be able to express themselves well regarding their own opinions, and to be able to put down their thoughts coherently on paper. Such a program is going to involve much review of the structure of sentences, the construction of paragraphs, and the increasing of vocabulary.

I began by having paragraphs written on topics of interest to the pupils. Thursday evenings I assigned what we term a 'Current Event' item. During the first few weeks pupils were allowed to read from their own writings even though some of these had been copied from elsewhere. Now I insist that the item be written in the pupil's own words. At first I chose only what I considered the better or more interesting paragraphs for oral reading, but soon everyone was given a chance.

Eventually I tape-recorded every voice. A few pupils were familiar with a tape recorder, but others who heard their own voice for the first time buried their heads on desks in embarrassment. But because they could recognize the voices of their companions, they realized this must be the way their voices sounded to others. Believe me, Grade 4 people are both critical and aware of their own failings after the taping sessions.

The progress made by individuals between tapings has been remarkable, and I am anticipating the day when every pupil will be able at any time to stand up and express a well formulated opinion.

My class family has now been given experience in addressing the rest of the class without a book in hand, and many of the members are doing this well. I encourage them to avoid memorization but to be able to tell us the item in his or her own words. Our next taping session will probably be done in this manner. Future plans include debates and discussions on particular topics, with an overall improvement of both vocabulary and the expressing of opinions.

I have never felt that verbosity by any teacher was out of place at the elementary level. The Grade 8 pupil of today who has had trouble with the new math course hasn't been impeded by the mathematics involved, but by the problem of understanding the language! What better way is there to improve the understanding of words than becoming familiar with them by learning and using them and meeting them daily? I want my family to learn and to love our language. Pupils should not be talked down to during all of their formative elementary years. Foreign languages can be learned more easily during a child's early years, and so can English.

May your David's mind be nourished as you so wish, and may he grow up to take an active part in our 'big and interesting world.' As a mother and as a teacher of an intermediate grade I can only hope my pupils will do likewise. This inspired hope is why I enjoy teaching.

ELVIRA C. BRYANT
A teacher in Terrace

a matter of Opinion

Hell - p!

J. R. FLEMING

I HAVE JUST returned from a one-day workshop on the new mathematics, supposedly my cup of tea, for I hope to major in mathematics at UBC. The only words which can describe my feelings toward education at this moment are 'sheer, complete, utter frustration.' It seems that every conference, workshop, convention or in-service session has this effect on me.

Because I believe that my case is fairly typical of many elementary teachers in B.C., perhaps it would be useful publicly to examine the cause of this frustration. My workload is not unusual. I teach a class of 27 children in Grades 6 and 7 in a four room elementary school. I teach Grade 6 arithmetic, language, reading, spelling, writing, social studies, and science and Grade 7 mathematics, literature, spelling, social studies, language, and science. I teach physical education, music and art to both grades. I am also

The author is principal of Roberts Creek Elementary School.

the principal and Civil Defence Director of my school and the chairman of our local Agreements Committee, but for the purposes of this discussion these aspects of my life will be omitted.

In order to comply with the modern theory that a teacher should, at the very least, be well-versed and, preferably, extremely knowledgeable in the material which he teaches, I am supposed to be an expert in modern mathematics, at teaching reading, at explaining the human, physical, and social geography of the Eastern Hemisphere, in the ancient and medieval period of the world's history, in the sciences of astronomy, biology, chemistry, physics, and general science, in the anatomy of the human body and its improvement through exercise and other physical activity, in the coaching of three or four major games, in the history of music, in choral singing, in the instruction of instrumental music, in the history of art, in painting, modelling, sketching, drawing, etc. I must be able to spot the individual

difficulties which my students are having, I am expected to have a remedial program ready to combat these difficulties as they arise, and, at the same time, enrich and exhort to greater things those who have difficulties. I am also expected to be well enough versed in psychology and childhood development to diagnose and deal with any social or emotional problems which the twenty-seven students are experiencing. I am constantly reminded that, as a classroom teacher, I am primarily responsible for the public relations of our profession and must therefore deal tactfully and diplomatically with all members of the public. I am expected to be able to recognize and diagnose all communicable diseases and be the guardian and conscience of my class's health.

As if it is not enough that I am expected to be expert at all these things, I am supposed to be extremely enthusiastic in every lesson in every subject in every possible situation every day of the week. I must have my lessons

carefully prepared, my duplicated exercises ready to go, and be ready to supplement every lesson with carefully prepared, colorful, appropriate visual aids. At set intervals I must be ready to test my class with skillfully prepared tests which will not fail to test the material thoroughly, objectively, subjectively and to the proper depth and standard. I must keep an accurate and comprehensive list of marks showing the pupils' standard of work and a register showing their daily and monthly attendance.

I have not included in this list *any* activities which are not involved *directly* in my classroom work such as supervision, first aid, teachers' affairs, self-improvement through courses and in-service, ad nauseum.

The obvious question which arises out of this is: *'can one human being do all these jobs at least effectively, and preferably, well?'* My humble opinion is an

emphatic *'NO!'*

In order that this diatribe not be considered the ordinary griping heard in every staffroom, I am prepared to offer a complete and drastic revision of the elementary school system of this province, which would do much to make the teaching load more bearable, even enjoyable. My suggestions are these:

1. All elementary teachers would become specialists in one of four areas: (a) Grade 1, (b) languages, (c) social studies, or (d) science. The other elementary subjects would be taught either by other teachers or instructors who prefer such things.
2. Each specialist would be responsible for the preparation, presentation, and evaluation of his subject from Grade 2 through to Grade 7.
3. The Grade 1 teacher's role would be to specialize in teaching the students to read, to write, and to do the beginnings of arithmetic.

Beginning in Grade 2 the specialists in these areas would take over.

The advantages to and arguments in favor of such an arrangement should be obvious to any teacher carefully considering my recommendations. I realize that some things supposedly present in our present system might be diminished—the roles of clucky hen, nose-wiper, eternal confidant, counsellor, or in short, substitute mother. However, just what are we supposed to be doing, replacing the parent or teaching the children to the best of our scholastic and instructional ability? I submit that the most important aspect of school is the fostering of learning and that any other responsibility must rest in the hands of the parents and the multitude of government agencies which are ever-ready to assist them. I believe that under my system I could do a far better job in my chosen field and accomplish my aims to everyone's satisfaction, especially my own.

THE KEY TO CIVILIZATION'S PROGRESS.

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Across the desk

A Past President Replies to Mr. Addicott

Penticton, B. C.

The Editor,
Dear Sir:

This is my first experience in writing a 'letter to the editor'; however, as chairman of one of the committees which is trying to do something about class size, I felt I must answer Mr. Addicott's letter in the December issue.

First, may I say that I cannot help sympathizing with him in his concern about the needs of education. At his age (I am guessing that he is young), I think I would have used the word 'immediately' as frequently as he did. Today I would be a little more patient.

Experience has taught me two things. First, that our Federation had made very real progress over the years. May I give just one example? Fifteen years ago teachers were justly indignant because, despite the fact that they had to teach the curriculum, they were ignored in the planning of it. Today we are partners with the Department of Education in curriculum planning. Second, that although such things as more classrooms, more teachers and more money are urgently needed, they will come only when we convince the general public and the government that such things should have a high priority. We may believe that these things are more desirable than roads and bridges, but we can't force others to agree with us.

The Federation is continually working for what Mr. Addicott wants. At the last AGM the Philosophy of Education Committee was instructed to make a thorough study of entitlement. As a result, briefs have already been submitted to the Department

pointing out the need for a more favorable pupil-teacher ratio in the elementary school and also the need for more library services. Work is proceeding on this study of entitlement for the secondary level.

My main reason for answering Mr. Addicott's letter, however, is his apparent assumption that teachers generally are doing nothing and that he can help the cause of education by joining them. Both assumptions are, of course, false.

Mr. Addicott, you and I and about 14,000 others like us are the Federation, and without us the officers can do little. It's easy to demand and do nothing, but that gets us nowhere. If we want better education, then we who profess to be interested in it have to be willing to work for it.

I hope, Mr. Addicott, you will find another committee on which you can work. We need men who are discontented with what we have now; we need their vision and their ideas, but most of all we need their work.

Yours very truly,
REGINALD B. COX

On Our Book Reviews

To Mr. Vito Cianci, with respect to an article by him published in the November issue:

Since *The B.C. Teacher* is an educational magazine and does not bear any likeness to either the book review section of the *New York Times* or the *Saturday Review of Literature*, both of which publish lengthy and critical book reviews, the criticism of Mr. Cianci is distinctly out of place. Mr. Cianci wants 'real' book reviews. He will find these in the journals

mentioned above.

The purpose of the 'New Books' page in *The B.C. Teacher* is to acquaint teachers with titles that will probably be of use in their daily programs. In cases where fiction titles are reviewed I would remind Mr. Cianci that there are many teachers and schools in British Columbia who do not have the excellent publishers' or library services that are enjoyed in the southern areas. British Columbia has many rural schools which are not visited by book agents or representatives of publishing houses. Must we deny these schools the privileges we get so easily from the publishers?

Mr. Cianci's point of view is a selfish one. He wants books for himself, and he gives no real, generous thinking to other teachers. Let him learn how really to be generous without referring to 'blurbs,' which at best is an insulting word to describe the very good book reviews that our teachers have been contributing.

Yours truly,
ESTHER HARROP

Is Our Liberty Threatened?

Langley, B.C.

The Editor,
Dear Sir:

Since the end of the second World War and the advent of the bribe offered by Lord Beveridge of 'security from the cradle to the grave,' many mental horizons that might have been broad have been narrowed to a tunnel with a dollar sign, or its equivalent, at the end of it.

Resulting comfortable conformities are entrenched behind the barriers of pseudo-respectability; ridiculous ancestral behavior pat-

terns have remained in vogue, undergirded with the ancient shibboleth, 'we are only human': and clear thinking has been imprisoned on the grounds that it does not pay to think.

Smoke screens of resentments, fears and intolerances support and are in turn supported by militarism as a means of employment to the detriment of broad sympathies and to the refutation of the need for a brotherhood of man.

Tariff walls, epitomes of selfishness and political experiences, have strangled world trade and a sharing of the benefits of civilization; big interests and monopolies have restricted the use of raw materials (thus perpetuating Hitler's excuse for war, namely, room to expand), and reckless exploitation of natural resources continues the age-long process of making deserts in spite of the vital needs for husbandry.

Now, instead of endless vistas of opportunity, we have become

a herd, bent on killing off supposed rivals, and more and more at the mercy of a visionless bureaucracy.

But the pendulum swings as we outwear fear of an inevitable doom, and here and there individuals emerge as thinking beings with a sense of perspective and the wit to do something about it. Are we to continue to be frustrated into subservience toward all manner of major and minor discrepancies and abuses for lack of the moral courage to speak out? Is the integrity of clear vision, with accompanying action, to give way before entrenched patterns and inertias? It was not so with our pioneering ancestry, and never was there such a need for spiritual courage, clear thinking and honest enlightened leadership as we have today.

The hope for the world seems to lie in those educators and parents of the younger generation who have disinterested vision and will

bring perspective to bear upon our own natures and the nature of the social problems that beset the world.

We need educators with faith in the native endowments and goodness of mankind, who will iron out their own kinks in consciousness, thus freeing themselves to become creators of better days for mankind; giants in accomplishment.

Finally, we need an administration who, regardless of their own unconscious desire for power, will cheerfully dedicate authority to the capable teachers on the firing line who are familiar with the trends and needs of their charges.

It is to be hoped that, with the incorporation of the new school organization, appropriate liberty will go to qualified educators, and that certification in the future will stress the character teachers should supposedly impart, by osmosis, to their pupils.

Yours truly,
ALWYNE BUCKLEY



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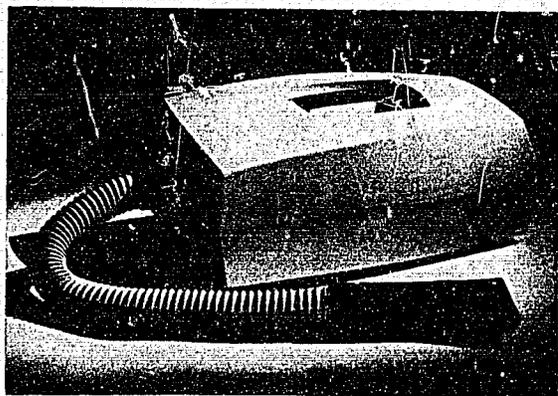
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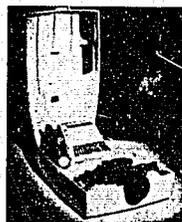
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new Books

ESTHER G. HARROP, Book Review Editor.

SPECIAL REVIEW

The Leisure Age; Its Challenge to Recreation, by N. P. Miller and D. M. Robinson, Wadsworth Publishing Company, Inc., Belmont, Cal., 1963. 497 pp.

Recreation in American Life, by R. E. Carlson, T. R. Deppe, and J. R. MacLean, Wadsworth Publishing Company, Inc., Belmont, Cal., 1963. 530 pp.

Two recent books in the field of recreation will have particular interest to all educators. With the current position of education under question in many places and many serious problems raised by the role that public education is to play in our lives, a look at what two groups of recreationists think of the position of education with regard to leisure should be of value.

All people are aware what important aspects of everyday life leisure and its close associate, recreation, have become. Leisure time and recreation in one form or another have been present in all societies. It is, however, only in the middle years of this century that they have reached out to touch all phases of our society. There are many manifestations of the impact of leisure on people—cookouts, weekend traffic jams, camping trips, square dancing clubs, adult education—and conversely of the impact of people on the means for fulfilling their leisure demands and needs.

The educational system has not escaped the burgeoning of recreation; in fact it has become one of the major purveyors of recreation through such media as evening courses in many academic and non-academic subjects and through the use of school facilities for many community activities.

In addition to this direct participation, the authors of these books see education as having a major role in preparing people to use their leisure time profitably. Carlson and associates state their views very forcefully with a quotation from John Dewey: 'Education has no more serious responsibility than making adequate provision for enjoyment of recreative leisure, not only for the sake of immediate health, but . . . for the sake of its lasting effect upon habits of mind.' Miller and Robinson state their case in these words: 'The leisure age requires modern education to accept a new role of educating individuals toward a new leisure ethic, while education's role of educating for competence in important fields of life activity influences greatly the emerging leisure culture and the nature

of the recreational pursuits of the people.' Here then is the case for a close relationship between education and recreation.

In general these two books set out to review the present recreation situation as it has developed over time, and to see how leisure and recreation fit into the general outlines of American culture and life. They also provide a useful review of the growing body of specialist literature that has appeared in recent years.

The organization of both books is similar. There is a discussion of the historical developments of leisure and recreation and of the theories and concepts that have grown up over time. Miller and Robinson devote much more of their book to this aspect of the topic than do Carlson et al. They both have a good look at the various agencies, private and public, local and national, that in some way take care of many recreation demands. Carlson delves much deeper into this topic and this review of local, state and federal responsibilities in a valuable statement of the position in 1963. While the material covered is particular to the United States of America, it is relevant in a general way, especially at the local level, to Canada.

There is a thorough discussion of recreation as a profession and of the education, personnel standards and qualities that should be sought. Carlson and associates devote an entire section to recreation programs, but the subject receives scant attention in the other volume. Both books close with a look at the future of recreation and they see recreation as a key element in the quality of American life now and in the future.

These books are the latest to appear in what is a growing library of recreational works. They will be standards in the field for some time, and should be extremely useful reading for all people outside the field of recreation who in one way or another are affected by it. Educators who are seriously concerned with the role of the school in public recreation would do well to read either or both of these books to see what recreation expects of education. Whether education can fulfill all the demands placed upon it is, of course, the responsibility of the educator.

—G.deR.T.

ART

Collect, Print and Paint from Nature, by John Hawkinson. George J. McLeod Ltd., Toronto, 1963. Illus. \$3.75

This book combines suggestions for using such natural objects as stones, leaves, moss, etc., in art projects with descriptive passages of areas where these objects may be found. The techniques

explained are limited in number and, in some cases, very stereotyped for children's art.—M.A.S.

Exploring Finger Painting, by Victoria Bedford Betts. D. Publications, Worcester, Mass. (Can. Agt. Moyer Div., Vilas Industries Ltd., 20 Densley Ave., Toronto or local Moyer Div. branches) \$7.25

This is an excellent reference text for the art teacher interested in experimenting in finger painting techniques, and in the use of the medium in other exploratory ventures. There are some 300 illustrations of examples of a large variety of experiences and experiments in finger painting, printing and screening. Unfortunately all illustrations are in black and white. Some examples in color would have enhanced the text. Though the cost may seem relatively high, scores of ideas illustrated and carefully explained are worth the price. Teachers of art should try to get a copy for examination.—H.M.P.

COMMERCIAL

Building Typing Skills, Bk. 1, by McConnell and Darnell. McGraw-Hill, Toronto, 1962. \$2.95

An excellent text for first year typing. The illustrations are clear and to the point. The lesson plans appear to be very carefully conceived and worked out. The layout is very good.

One criticism of the book is that the type face in the exercises that the students are to type appears rather small. If the type face were larger or darker, it would be easier for the students to read, and beginning students in particular need every help possible in reading the copy.

—A.M.L.P.

The First Few Frantic Weeks, by George P. Hillmer. Commercial Teachers' Edition. Pitman (Canada) Ltd., 1961/62 \$3.50

Although this book is intended primarily for beginning teachers, all commercial teachers will find in it effective suggestions for improving their classroom procedures.

Through its liberal use of outline form and a snappy, concise writing style, the suggestions and methods are presented in an easy-to-read manner in 57 short chapters.

Such fundamentals as "Planning a Lesson" and "Kinds of Tests" are treated in detail and important phases of these and similar fundamentals are emphasized throughout the text.

Most teachers, however, will find the book's greatest value in the practical, day-

to-day suggestions that make motivation, teaching and marking easier and more effective. Not all the suggestions would be applied by any one teacher, but for the beginning teacher in particular the suggestions and ideas would be of great assistance in the first teaching year.—A.M.P.

EDUCATION

Foundations of Education. Edited by George F. Kneller. John Wiley & Sons, New York, 1963. \$6.95

This book explores the present status and future possibilities of the American school system by means of a comprehensive analysis of such problems as the nature of educational knowledge, values, ideas, and ideals. Contributing authors discuss the history and philosophy of education, the relation of education to political thought and culture in general, and education as a science.

In the final chapters, the more practical problems to which the theoretical knowledge can be applied are considered in the light of today's American school system.

This book seeks to give to the reader the background to meet the challenges of education and to reveal the complexities of an educational career.—R.L.T.

MATHEMATICS

Mathematics Enrichment—Book D, by F. J. Mueller and A. M. Hach, Longmans Canada, Toronto, 1963. Cloth, v + 137 pp., \$2.90

This book is written somewhat as a cross between a programmed text and a conventional text. Brief expositions are followed by a series of questions which lead the student to discover the principles by himself. The material is so written that the student does work entirely on his own. Detailed answers to all questions are contained at the end of the book. Book D covers patterns (symbols, numerals, decimal structure), exponents (shorthand multiplication), number bases (the four operations in base 5 and 2), and equa-

tions (open and closed sentences). Each chapter is followed by a unit test. Suitable for Grades 6 to 8 as enrichment or review.—A.J.D.

Mathematics Enrichment—Book E, by F. J. Mueller and A. M. Hach, Longmans Canada, Toronto, 1963. Cloth, vi + 134 pp., \$2.90

Book E is similar to Book D in style and format. It also covers four topics, namely, using the slide rule, using the clinometer, probability ratios, and introduction to sets (done very well). Very suitable for enrichment and review for Grades 7-9 and even higher. Many interesting devices and projects make this a valuable book for a math or science club. Each chapter has unit tests, full answers at end of book.—A.J.D.

MISCELLANEOUS

My Garden Grows, by Aldren A. Watson. Macmillan of Canada, Toronto. \$2.95

For city children especially, this book will help them understand how the vegetables they eat daily are grown. It is written in smooth flowing and descriptive prose accompanied by excellent illustrations showing the seeds and development of all the common vegetables.—D.S.L.

More Adventuring Together, by Jeannette L. Court. School Aids and Text Book Publishing Co. Ltd., Regina. \$1.25

Suggestions dealing with various social studies topics, classroom suggestions and special days. A teacher in an ungraded school might find some useful ideas. Not especially well recommended.—D.S.L.

Winkle Pickers, by Bill Straiton. Longmans Canada, Toronto. Illustrated by Len Norris. \$2.95

The Sun cartoonist has illustrated this book of rhymes. Suitable for parents to read aloud rather than for the classroom

library as the humor and illustrations would not appeal to all children.—D.S.L.

Black's Children's Encyclopaedia. Macmillan of Canada, Toronto. \$1.50

The set is comprised of 12 books, simply written, well illustrated, dealing briefly with things of interest to the modern child. Would be useful as a "first" encyclopedia or for less studious pupils. Published in England.—D.S.L.

The Argonauts, by R. D. Wormald. Drawings by Imre Hofbauer. Longmans Canada Limited, Toronto, 1962. 132 pp. 90c

This is a useful little text with good footnotes and an index and glossary of characters. The language flows well and the students should find *The Argonauts* interesting.—W.D.M.S.

Cups and Saucers (All About Books), by W. Worthy. Longmans, Toronto, 1963. Illus. 80c

A well illustrated and informative little book which traces the development of pottery articles from earliest times to the present day. The author discusses the terms and the steps used in the manufacture, and while the format is a little juvenile for high school, the content is sufficiently technical and detailed to prove of use as reference material for Grade 8. Reading level—Grades 5-7.—M.D.

Knives, Forks and Spoons (All About Books), by W. Worthy. Longmans, Toronto, 1963. Illus. 80c

An informative booklet concerning the production of steel, and its use in the manufacture of cutlery. Contains factual information on blast furnaces and stamping machines, with good, clear diagrams and illustrations. Useful for senior elementary grades as classroom reference. Reading level about Grades 5-7.—M.D.

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about People

In Memory of A. J. Dodd and Miss McKillican

It is with deep regret that we report the sudden passing in November of Arthur J. A. Dodd, Director of Adult Education for Langley and former Supervisor of Special Education and Services for Richmond.

Mr. Dodd was born in New Zealand and came to British Columbia in 1923 after taking teacher training at Christchurch. He began to teach in New Westminster schools, and remained there until 1936, when he joined the staff of Lord Byng High School in Vancouver. He taught social studies and guidance and was boys' counsellor at Lord Byng until 1946.

From 1947 to 1954 he withdrew from teaching to dairy-farm in Langley. During this whole period he was a school trustee in Langley, and was chairman of the board for six years. He returned to teaching in 1954, as boys' counsellor at Richmond High School. He spent the year 1955-56 taking the Special Counsellors' course at Vancouver School Board and returned to Richmond as Special Counsellor and Supervisor of Special Education and Services.

It was only in September 1963 that he took over the position of Director of Adult Education in Langley.

Before going to Langley he had developed a wide reputation as a very successful coach of high school and university English rugby and soccer.

In paying tribute to Mr. Dodd, H. D. Stafford, District Superintendent of Schools, said, 'The late Art Dodd has had a very wonderful

career as a teacher' and he was 'one of the finest men it has been my privilege to know.'

Said the Langley Teachers' Association *Bulletin*: 'Teacher, counsellor, churchman, sports enthusiast, and latterly director of our adult education program, Art will be remembered by those whose lives he has touched as a man of immense humanity. It was not possible to take a station above or below Art Dodd. Somehow you always ended up beside him.'

Mr. Dodd is survived by his wife Muriel and three sons, to whom the sympathy of his colleagues is extended.

Miss N. Margaret McKillican, a life member of the Federation, passed away on November 27, in Victoria.

Miss McKillican, born in Victoria, taught school there for many years, starting her teaching career in the old Craigflower School at the age of 18. She later taught at the Boys and Girls Central and then at North Ward School. She retired as vice-principal of North Ward School in 1951.

Miss McKillican had been president of the Victoria and District Teachers' Association and was secretary-treasurer of the BCTF. In retirement she retained her interest in educational activities.

She is survived by several nieces and nephews.

Two Appointments to CTF Staff

Dr. T. Barr Greenfield, a former Vancouver teacher, was appointed

Research Director of CTF to replace Dr. Floyd Robinson, who has been named the first director of the Canadian Council for Research in Education.

Dr. Greenfield has just completed his Ph.D. work at the University of Alberta. He was born in Saskatchewan, attended elementary and high school in Vancouver and graduated with a B.A. from the University of B.C. in 1951. He taught in Vancouver elementary schools for eight years and was vice-principal of Queen Alexandra School before going to the University of Alberta in 1959 for graduate study.

Norman M. Goble, a secondary school specialist with 14 years' experience in two countries has been appointed Assistant Secretary-Treasurer of CTF.

He was head of the classics department at Ridgemont High School, Ottawa, before commencing his new duties on January 1.

Born in Scotland, Mr. Goble graduated with an M.A. in classics from Edinburgh University. He holds two Scottish teaching certificates, one in primary work and the other as a classics specialist. He taught in Scotland for nine years and in Ontario for five. During the war he served for five years in the army. He is fluent in both French and English.

Both appointees have been active in teachers' associations during their teaching careers, Dr. Greenfield in Vancouver Elementary School Teachers' Association and the BCTF and Mr. Goble in the Scottish Secondary Teachers' Association and OSSTF.

for Your information

Opportunity to Lecture to British Schools

The Federation has been invited to submit nominations to Canadian Teachers' Federation for two teachers to go to England for the 1964-65 school year under the auspices of the Commonwealth Institute of London. The Institute annually asks CTF to find two teachers who will undertake lecture tours depicting life in Canada, at the expense of the Institute.

The majority of the talks would be to primary and secondary modern school children in the age groups 9 to 11 and 11 to 15, but more formal talks would also be given to 5th and 6th form groups in grammar schools where pupils are in the 15 to 18 age group. In the course of the series of 5-day tours the teachers visit practically every kind of school in England and arrangements are made for them to visit Teacher Training Colleges, and talk to administrators in education.

The money available from the Institute (about £700 in fees) is considered sufficient for the nine months of the school year, but in addition the teachers need their return fares from Canada, plus about £350 for their maintenance during the school holidays. The Canada Council makes a grant of \$2,000 to each teacher and this is extended to cover such items.

Experience has shown that the best lecturers for the purpose are specialists in secondary school geography and history.

Teachers who are interested in such an opportunity as the one offered are invited to write the General Secretary of the Federation, 1815 West 7th Avenue, Vancouver 9, giving details of their

background, by February 1. Nominations must reach CTF by February 15. Announcement of CTF's choices will be made later.

Financial Assistance for Graduate Study

A program of financial assistance for graduate study in Education provides assistantships and fellowships in six major fields for well-qualified students working toward the master's or doctor's degree has been announced by the Faculty of Education, University of Alberta, Edmonton.

The assistance available ranges from \$2,100 to \$3,300 for an 8-month period. Limited travel grants are also available to appointees coming 1,000 miles or more, as is up to \$1,000 intersession assistance.

Enquiries should be addressed to the Head of the Department of one of the following: Educational Administration, Educational Foundations, Educational Psychology, Elementary Education, Industrial and Vocational Education or Secondary Education, at the University.

Scholarships to Holland

The Netherlands Government offers five scholarships to Canadian nationals for study in the Netherlands during the academic year 1964-1965.

Each scholarship will be tenable for a period of ten months. The amount of the scholarship is three thousand five hundred guilders. Scholarship winners will receive free tuition for any course included in the regular program of a university or in the regular program of an institute on university level.

Travel costs are not included in these scholarships. However, an

allowance will be made to compensate for higher travel costs incurred by students from the western part of Canada.

Eligible for the scholarships are: university students, research workers and other categories, such as architects, painters, musicians, etc. University students and research workers should be pursuing graduate or post-graduate studies. Creative arts students should have sufficient training and experience to take advanced courses in their art.

Applicants are requested to furnish:

- Recommendations from at least three persons who are familiar with their work and who are experts in the field concerned.
- A biography mentioning date and place of birth, marital status, present occupation, educational qualifications and possible other training as well as experience.
- If possible, specimen of academic papers or photographs of artistic work produced.

Applications should be sent to the Netherlands Embassy, 12 Marlborough Ave., Ottawa, before March 1, 1964.

British Summer Schools

Four British universities have once again arranged a program of international Summer Schools which will be held at Edinburgh, Oxford, Stratford-upon-Avon and London during July and August.

The University of Birmingham will offer a course on Shakespeare and Elizabethan Drama at Stratford from July 5 to August 14. From July 6 to August 14 the University of London will offer Twentieth-Century English Literature, in which the main emphasis will be on the work of English writers, but account will be taken of various continental influences. The University of Oxford will offer, from July 6 to August 14, History, Literature and the Arts of Seventeenth-Century England. The Scottish Universities will offer at Edinburgh from June 29 to August 7 British History, Philoso-

phy and Literature 1688-1832.

Fees for resident students at the three English university courses will be £105; at Edinburgh £100. This amount covers board, residence and tuition. The fees for non-resident students vary.

A brochure containing detailed information and application forms may be obtained from Dr. G. C. Andrew, Executive Director, Canadian Universities Foundation, 75 Albert St., Ottawa 4, Ontario. The general closing date for applications is March 31, 1964.

W. J. Gage Limited Research Fellowship

The W. J. Gage Company offers a research fellowship of \$3,000.00, tenable for one twelve month period to a suitably qualified student in the Ph.D. program in the University of Alberta. The fellowship must be used in research in concept formation in and through language, preferably in children. The award may be held in either the Department of Psychology or the Department of Educational Psychology.

Application forms should be obtained from the Administrator of Student Awards, University of Alberta, Edmonton, Alberta, in time to be completed and returned by March 1, 1964.

Spring Conference of Music Educators

The British Columbia Music Educators' Association will hold a spring conference in Victoria on April 2 and 3. Plans are still tentative, but several outstanding clinicians will be on the program to deal with the music text used in B.C. schools, the Orff method of teaching music, the use of records for music listening and the playing of recorders.

There will be two concerts, the first of which will present a panorama of the music program in School District No. 61 (Victoria). The second will consist of performances by the All-province Band, Orchestra and Choir, made

up of some 400 students from all parts of B.C., especially chosen to play or sing with the groups. Three specialists from Washington will lead the three groups in performance.

Further information will be disseminated at a later date.

Summer School of Linguistics

The sixth Summer School of Linguistics, jointly sponsored by the University of Alberta and the Canadian Linguistic Association will be held from July 2 to August 14, 1964, at the University of Alberta in Edmonton.

The courses to be given include General and Structural Linguistics, Anthropological Linguistics, Applied Linguistics and English Studies. All are credit courses.

A bulletin giving full details is available upon request to the Registrar's Office of the University. Additional information is available from Dr. G. N. O'Grady, Associate Director, Summer School of Linguistics, University of Alberta, Edmonton.

Educators Call for More Audio-Visual Aids

At the close of a recent meeting at Unesco House, Paris, some 300 educators and specialists from 36 countries called for more co-productions of educational films and better customs facilities for films.

The aim of the conference was to provide a forum for the exchange of ideas and knowledge about audio-visual aids. Ways of furthering and organizing international co-operation in this field were considered. The conference was convened, also, because the shortage of teachers has made audio-visual teaching methods all the more necessary.

The meeting was organized by the International Council for Educational Films in association with WCOFF and the International Film and Television Council and with the assistance of UNESCO.

The delegates stressed the need for more international co-productions

of modern language and teacher-training films. They also suggested that 'temporary import certificates' be extended more often.

New Educational Project

A new approach to teaching literature has been incorporated in a major educational project introduced recently by Washington Square Press, the Educational Division of Pocket Books, Inc.

Known as the *Reader's Enrichment Series*, the program is designed for the junior and senior secondary schools. Twenty-four titles are now available, and others will follow.

At the end of each book in the series is a 'Reader's Supplement' of 32 pages or more. The purpose is to enrich each student's understanding of a great book and to provide a program for combining a study of that book with practice exercises which will increase his skills in language arts.

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Teaching About the UN

This new bulletin is an expansion of the education services of the United Nations Association in Canada, whose aim is to provide a specialized service designed specifically to meet the needs of educators and educational institutions active in teaching about the United Nations and for international understanding.

The bulletin includes reviews of current books and filmstrips, lesson outlines, program suggestions, reports of noteworthy school activities and articles designed to provide background information. It is prepared on three-hole punched paper, for ease of filing in binders.

Copies are available from R. D. Shoss, c/o United Nations Association, National Office, 529 Bloor Street W., Toronto 5, at a cost of 25c each.

Aid for Cuba

In the fall of 1963 Hurricane Flora caused tremendous death and destruction in Cuba and help is urgently needed.

The Cuban Ambassador to Canada has made a special appeal for medicine and food for his distressed countrymen.

The Cuban Hurricane Relief Fund has established a center for the receipt of donations at Box 664, Adelaide St. Post Office, Toronto 1. Those wishing to make a contribution to this fund should write directly to the above address.

New Lesson Aid Ready

Latest addition to Lesson Aids is a map of Central America, No. 2651, showing the countries and their capitals. (Lesson Aid No. 2617 shows both Mexico and Central America.) Like all Lesson Aids maps, No. 2651 sells for 1 cent.

Campaign on Inequalities

CTF's important national campaign to bring to the attention of Canadians our gross educational inequalities was formally opened on November 13, when CTF's full Board of Directors presented the Brief on Inequalities to Prime Minister Pearson. (The full text of the brief was published in our December issue.)

The Prime Minister was receptive to the brief, was 'disturbed' by the inequalities detailed, but was understandably cautious about the role the federal government should play in seeking a national meeting.

He indicated that the government would find it difficult to initiate such a meeting but that it would be receptive to approaches by the provinces.

The brief has been printed in a booklet containing both French and English texts, and is available from CTF office.

In addition to this basic documentation, CTF has published four pamphlets telling the story of inequalities and their meaning to Canadians. These also are available from CTF.

Most teachers will have seen news stories and editorial comment on November 14 and later, about CTF's brief. Radio and television stations also had good coverage. CTF is following up media presentation by discussing the possibility of major articles about inequalities with magazine editors.

Finally, CTF is actively seeking support for its campaign from other national organizations. They have been presented with the brief, given an outline of the campaign, of the hopes and strategy for the coming year.

For over 30 years Canadian teachers have been concerned with unequal opportunities from province to province. With the increasing mobility of Canada's population and the close relationship between education and a nation's productivity, this concern has reached a point of alarm.

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Findings from Two Recent Studies

SEVERAL B.C. TEACHERS have recently completed theses for master's degrees. Here are brief summaries of the findings of two of the theses.

In one study R. A. Perkins of Victoria found marked differences in counsellors' times and counsellee loads in the schools of our province last year.

A counsellor in one school, responsible for 235 students, spent only 10% of his time counselling, while in other schools counsellors responsible for the same number of students had anywhere from 10% to 100% of their time for counselling. One counsellor, with a counsellee load of 300 students, spent only 20% of his time in counselling, while another counsellor, with a counsellee load of only 15 more students, spent all his time counselling. Although the two counsellors had comparable counsellee loads, one had five times as much time as the other.

The survey also revealed that the average counsellor last year was responsible for counselling 205 students and was allowed 38% of his total school time. Inasmuch as the Department of Education approves of 'one counsellor employed on a half-time basis for each 200 pupils or major fraction thereof in a secondary school,' Mr. Perkins concludes that the average coun-

sellor was short by approximately 12%, four periods per cycle of seven school days, or 108 periods a year in counselling time. Only 15% of the counsellors studied spent more than half their time in counselling.

The American School Counsellors' Association has indicated that it believes a total of 250 pupils is a proper load for one counsellor. This ratio would result in nearly twice the counselling time approved in B.C.

In another study R. F. Cunningham of Campbell River examined the 'latecomer' to teaching in B.C. Mr. Cunningham defines the 'latecomer' as any regular, full-time teacher at any level from kindergarten to Grade 13 who, at the time of his first teaching appointment, was thirty years of age or older, and who undertook his training at UBC or Victoria College between 1956 (the first year of the College of Education) and 1960.

Mr. Cunningham made his study to ascertain (a) if there is a potential source of teachers over the normal entry age, and (b) how 'latecomers' compare with their younger counterparts. Tapping such a source of teachers would be one means of reducing the teacher shortage.

The research was conducted in two parts. In the first, the stand-

ings of the latecomers in course work and practice teaching were contrasted with those of normal entrants as obtained from standings provided by the registrars at the two universities. In the second part, the biographical data obtained from one hundred fifty-seven questionnaires was analyzed.

Thirteen percent of all teachers trained, including more than a quarter of all secondary teachers, were latecomers—and the numbers are increasing. Nearly two-thirds of the men, but fewer than a quarter of the women, started teaching with at least a bachelor's degree, and there were twice as many men as women. At the secondary level the standings of the latecomer were slightly better than those of the normal entrant, but at the elementary level the latecomer did somewhat less well, especially after a compulsory mathematics course was introduced. Age was not an important criterion in the ability to obtain good marks.

The median age of the latecomers was thirty-six, the women being four years older than the men. Three-quarters of the men and slightly fewer than one-half of the women were married; nearly one-fifth of the women were widowed, divorced or separated from their husbands. Training costs ranged from \$250 to \$4,500, but the

average cost of training for a person away from home, exclusive of the costs involved in maintaining a home and family, was in the region of \$1,000. A half of the group helped finance training through savings, and another third, through loans. Thus for one-fifth the training period was one of great financial difficulty. By entering teaching one-third of the men

and two-thirds of the women earned more than they did before training. Men had a median loss of \$657 and women a gain of \$222.

The men latecomers were much more encouraged to enter teaching by their wives than by their instructors, and once started, enjoyed teaching and intended to stay in the field of education for the remainder of their working lives.

They were not enthusiastic about their training (getting the most satisfaction from practice teaching and from discussing the work with their fellow students) and wanted to get it over with as quickly as possible. The latecomers were almost unanimous in that had they to make the change to teaching again, they would do so.

A Tribute to Miss X

C. D. OVANS

I NOTICED HER as I passed the Lesson Aids room and stopped short. What would a very old little lady want with teaching materials?

'I am just looking to see if there is anything here that might help little Kenny,' she said, when, out of curiosity more than anything else, I asked her if I could be of any service to her.

Kenny comes in from the country every Saturday morning for tutoring,' she added. 'His parents are poor so I don't take any money for it, but somebody had to help the little fellow. Six months ago even his mother was saying he was stupid and on his report cards his teacher said he was lazy. I knew he wasn't stupid, and if any youngster his age seems lazy about learning it is because the work is beyond him. I taught long enough to know that. Now he's at the top of his class in all subjects but one.'

She then went on to tell me about other pupils she had tutored in recent years and how she had in every case been able to transform a discouraged, backward child into a happy learner.

'Tutoring has become your hobby?' I asked.

'If you want to call it that, I guess it's a hobby. It gives me something to do and it's nice to be

able to feel you are helping someone,' she replied.

'How do you determine just exactly at what point you should start your tutoring?' I enquired. 'Do you use any sort of diagnostic test?'

'I didn't start school until I was ten years old,' she said. 'We lived in the backwoods where there was no school. My parents were well educated. Both came out of private schools in England so they were great readers and there were always plenty of good books around home. My mother taught me to read and I read avidly. She hadn't tried to teach me anything else, though. When I first went to school they started me in Grade 1. I suppose it was obvious I didn't belong there, so the principal came along and said he would try me in Grade 7. My big problem there was arithmetic. I had no idea what a fraction was. They were teaching decimals. I knew that a decimal point had to go somewhere so I would put one in anywhere by blind guess. All of my early schooling was intermittent. There was always something I had missed from an earlier grade. I soon learned I just had to go back and pick up as best I could on my own, or through what help I could get from others.'

'The youngsters who are having trouble with their school work have somewhere along the line missed the fundamentals. I stick with the fundamentals. I find out what fundamentals the youngster has missed and teach them. A short time ago I was trying to help a girl who was failing English in Grade 10. I took her back to the parts of speech and to sentence structure.'

'What do you do about arithmetic now that the program has changed so much?' I asked.

'Oh, that doesn't bother me. I got some books last year and this year. I'm now taking a course in the new Grade 8 mathematics. You know, I find it fascinating. I find I'm getting really interested in it.'

'Would you mind telling me how old you are?' I asked.

'Not at all,' she said; 'I'm 87.'

Who is this teacher? I regret I can't tell you. She wouldn't have her picture taken. She didn't want her story told. 'I won't hear of it,' she said.

I couldn't resist writing this short sketch, incomplete as it is, but I must respect her desire for privacy.

God bless her. May she have many more years of unselfish giving!

How Effective Are Language Laboratories?

A RECENT STUDY which explored this question demonstrated the startling differences which may exist between subjective assessments of a new technique and the concrete results of quantitative research. The study was conducted in New York City by Dr. Raymond F. Keating, of the Institute of Administrative Research, Teachers College, Columbia University. It involved testing of more than 5,000 students in 21 out of 70 school districts belonging to the Metropolitan School Study Council.

A preliminary survey of all districts in the Council indicated that slightly more than half were using language laboratories. All but two of these had installed their equipment during or since 1959. French and Spanish were the languages for which the laboratories were most frequently used. The typical student position was furnished with a booth, a microphone and earphones with individual volume control. In six cases, the student was able to record at his position. All districts reported use of tapes as a program source. Average installation cost per student was about \$300.

The average amount of time per week spent in the laboratory was one classroom period. In all but one case, time regularly spent in the laboratory merely replaced time previously given to regular instruction in the foreign language.

On the basis of their subjective appraisal, most districts using laboratories indicated that pupils experienced a decided improvement in motivation, fidelity of pronunciation, and speed of learning. Half the district felt that results to date justified expansion of laboratory facilities. While some felt it was too soon to judge, none

stated that expansion was definitely not warranted by the results obtained.

In view of this favorable reaction, what did the research results show? The students were tested on three recognized skills of foreign language learning—reading comprehension, listening comprehension, and speech production. The total number of students was distributed among two groups, a language laboratory group and a no-laboratory group at each of four levels of experience, that is to say, years of French instruction. In only one instance, that of speech production scores during the first year of instruction, was there found a significant difference that favored the language laboratory group. Significant differences favoring the no-laboratory group predominated, and appeared in connection with each language skill tested.

When comparisons using IQ groupings were used, significant differences favoring the no-laboratory group of students were found almost exclusively with students at the upper end of the IQ distribution. Thus, at least in this study, high IQ students were found to be the most severely disadvantaged by the inclusion of the laboratory in the instructional program. Students of average IQ were found to be relatively unaffected by the inclusion of the laboratory in the instructional program.

When interpreting these results, one must keep in mind certain limitations of the study. For example, as the author is careful to point out, the study did not attempt to assess the effectiveness of the 'ideal' type of laboratory as used in the 'ideally arranged' instructional situation. In fact, the type of laboratory set-up described as customary in the schools

in the study is one of the minimum forms of the laboratory. It lacks what may well be one of the most important aspects of an effective laboratory—a feedback system which enables the student to compare his response with the correct response. Moreover, as the author points out, apparently very few changes were made in instructional situations in order to integrate the laboratory more effectively.

This study, therefore, does not prove that the language laboratory cannot be used effectively. However, as the author concludes, 'it does show that in schools of the Metropolitan School Study Council, a group of schools characterized by competent and well-prepared teachers, better results in certain important skill areas are being achieved in instructional situations which do not use the language laboratory.' The study thus serves as a warning that the uncritical acceptance of a new technique may do more harm than good, and suggests the need for continuous local programs to evaluate new techniques when their introduction is being considered.

The full reference for the study reviewed here is as follows: Keating, Raymond F. *A Study of the Effectiveness of Language Laboratories*. New York: The Institute of Administrative Research, Teachers College, Columbia University, 1963. 61 p.

A careful analysis of the degree of sophistication exhibited by various types of laboratory may be found in: Hayes, Alfred S. *Language Laboratory Facilities: Technical Guide for the Selection, Purchase, Use, and Maintenance*. New Media for Instruction 4. Washington: United States Government Printing Office, 1963. 50c.

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