*the BC teacher* FEBRUARY 1968 VOL. 47 NO. 5

# University of Victoria Summer Session

## July 2 - August 16

**It is proposed to offer the following credit courses at the 1968 Summer Session:**

| | | |
|---|---|---|
| ANTHROPOLOGY | 339 | Indians of the Pacific Northwest |
| ART | 100 | Survey of World Art |
| ART | 109/209/309 | Drawing I; Drawing II; Drawing III |
| ART | 205/305/405 | Design I; Design II; Design III |
| ART | 201 | Painting I |
| ART | 301/401 | Painting II; Painting III |
| ART | 481 | History of Architecture in North America |
| CHEMISTRY | 121 | Introductory Analytical Laboratory |
| CHEMISTRY | 124 | Introductory Phys. & Inorg. Chem. —Pt. I |
| CHEMISTRY | 324 | Modern General Chemistry |
| CLASSICAL STUDIES | 330 | Greek History |
| ECONOMICS | 100 | Introduction to Economics |
| ECONOMICS | 323 | Comparative Economic Systems |
| ART EDUCATION | 300 | Art Education (Advanced) |
| ART EDUCATION | 301 | Crafts in the Elementary Schools |
| EDUCATION | 245 | General Science for Primary Teachers |
| EDUCATION | 301 | Introduction to Measurement in Education |
| EDUCATION | 303 | Introd. to Psych. of Classroom Learning |
| EDUCATION | 305 | Psychology of Childhood |
| EDUCATION | 340 | Curriculum and Instruction in the Kindergarten and Primary Grades |
| EDUCATION | 342 | Developmental Reading |
| EDUCATION | 345 | Science for Intermediate Teachers |
| EDUCATION | 350 | Audio-Visual Technology in Education |
| EDUCATION | 401 | Evaluation of Learning |
| EDUCATION | 406 | Psychology of Adolescence |
| EDUCATION | 407 | Introd. to the Study of Except. Children |
| EDUCATION | 408 | Education of the Gifted |
| EDUCATION | 415 | Diagnosis of Learning Difficulties |
| EDUCATION | 416 | Remedial Instruction |
| EDUCATION | 417 | Introd. to Counselling in the Schools |
| EDUCATION | 420 | Philosophy of Education |
| EDUCATION | 423 | History of Education |
| EDUCATION | 430 | The Organization and Administration of the B.C. School System |
| EDUCATION | 431 | An Introduction to Educational Administration |
| EDUCATION | 442 | Remedial Reading |
| EDUCATION | 501 | Measurement and Evaluation |
| EDUCATION | 750 | Directed Reading Courses in English, Geography, History, Mathematics |
| LIBRARY EDUCATION | 431 | School Library Services |
| MUSIC EDUCATION | 305 | Music Education (Advanced) |
| PHYSICAL EDUCATION | 240 | Physical Education Activities II |
| PHYSICAL EDUCATION | 241 | Human Physiology and Anatomy |
| PHYSICAL EDUCATION | 340 | Physical Education Activities III |
| PHYSICAL EDUCATION | 341 | Kinesiology |
| PHYSICAL EDUCATION | 342 | Hist. and Princ. of Phys. Education |
| ENGLISH | 100 | Literature and Composition |
| ENGLISH | 200 | A Survey of British Literature from the Elizabethan to the Romantic Period |
| ENGLISH | 201 | Studies in Literature |
| ENGLISH | 300 | English Composition |
| ENGLISH | 301 | Children's Literature |
| ENGLISH | 400 | Advanced English Composition |
| ENGLISH | 413 | Shakespeare Survey |
| ENGLISH | 423 | The Beginning of the British Novel in the 17th and 18th Centuries |
| ENGLISH | 433 | Modern Period, Eng. & Irish Lit., 1890-1914 |
| FRENCH | 150 | First Year University French |
| FRENCH | 240 | Intermediate French |
| FRENCH | 350 | An Advanced Course in French |
| FRENCH | 409 | Literature of the Seventeenth Century |
| GEOGRAPHY | 101 | Introduction to Geography |
| GEOGRAPHY | 204 | Canada and the United States |
| GEOGRAPHY | 307 | Historical Geography |
| GERMAN | 100/140 | Beginners' German; First Yr. Elem. German |
| GERMAN | 240/260 | Interm. German; Introd. to German Lit. |
| HISTORY | 102 | History of Canada |
| HISTORY | 201 | History of England |
| HISTORY | 204 | Medieval Europe |
| HISTORY | 412 | History of the U.S. in the 20th Century |
| HISTORY | 420 | The Evolution of the Canadian Constitution |
| MATHEMATICS | 220 | Differential and Integral Calculus |
| MATHEMATICS | 222 | Algebra and Geometry |
| MATHEMATICS | 249 | Introduction to Computing Science |
| MATHEMATICS | 332 | Algebra II |
| MUSIC | 110 | Introd. to Music History and Literature |
| PHYSICS | 101 | Elementary Physics |
| PHYSICS | 212 | Electricity and Magnetism, Electronics and Modern Physics |
| POLITICAL SCIENCE | 200 | Introduction to Political Science |
| PSYCHOLOGY | 100 | Introduction to Psychology |
| PSYCHOLOGY | 220 | Dynamics of Behaviour |
| PSYCHOLOGY | 335 | Developmental Psychology |
| PSYCHOLOGY | 412 | Special Problems in Psychology |
| SOCIOLOGY | 200 | Introduction to Sociology |
| SOCIOLOGY | 335 | Minority and Ethnic Group Relations |
| SPANISH | 240 | Intermediate Spanish |
| THEATRE | 381 | Children's Theatre |

A number of integrated programmes for teachers of kindergarten classes, occupational classes and of the educable mentally retarded will also be offered.

## Special Courses and Workshops

(These courses do not carry academic credit except where noted.*)

**Workshop for Counsellors—August 19-22**
This is a short intensive workshop for professional counsellors designed to present recent developments in the field and to give an opportunity for consideration of problems in counselling engendered by our modern society.

**Workshop in Chamber Music—July 3-12**
A ten-day workshop especially for younger musicians to study and perform under the guidance of distinguished professional wind, string, and keyboard players.

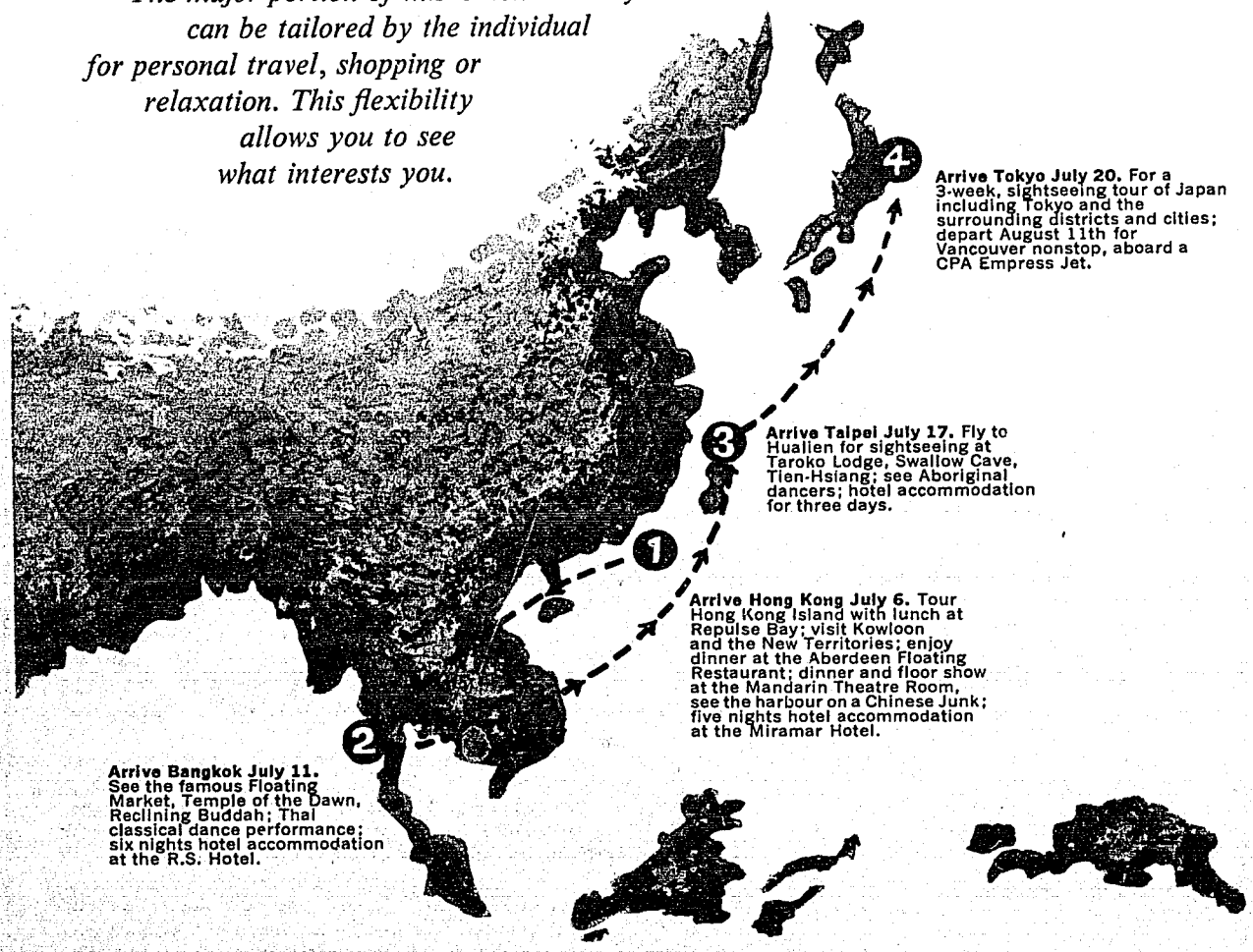
**Workshop in Theatre Practice—July 2 - August 9**
This workshop consists of a two-week introduction course relating the various arts of the theatre, and specialized four-week classes in areas of Acting, Design and Costuming, Technical Theatre and Stagecraft.

**La Maison Francaise—July 2 - August 16**
Oral-aural teaching by Voix et Images de France method. On-campus accommodation; French spoken at all times. Refresher course for teachers. "Ambiance francaise." Both credit* and non-credit courses will be offered in La Maison Francaise.

**For further information or a calendar please write to the Director of Summer Session, University of Victoria, Victoria, B.C.**

# Teachers' Tour of the Far East

*Join this exclusive 37-day travel programme designed especially for members of the British Columbia Teachers Federation. The major portion of this Orient holiday can be tailored by the individual for personal travel, shopping or relaxation. This flexibility allows you to see what interests you.*




**Arrive Tokyo July 20.** For a 3-week, sightseeing tour of Japan including Tokyo and the surrounding districts and cities; depart August 11th for Vancouver nonstop, aboard a CPA Empress Jet.

**Arrive Taipei July 17.** Fly to Hualien for sightseeing at Taroko Lodge, Swallow Cave, Tien-Hsiang; see Aboriginal dancers; hotel accommodation for three days.

**Arrive Hong Kong July 6.** Tour Hong Kong Island with lunch at Repulse Bay; visit Kowloon and the New Territories; enjoy dinner at the Aberdeen Floating Restaurant; dinner and floor show at the Mandarin Theatre Room, see the harbour on a Chinese Junk; five nights hotel accommodation at the Miramar Hotel.

**Arrive Bangkok July 11.** See the famous Floating Market, Temple of the Dawn, Reclining Buddah; Thai classical dance performance; six nights hotel accommodation at the R.S. Hotel.

The complete cost of this tour including economy air fare and connecting carriers, guide service, hotels, majority of meals and sightseeing by motor coach is $1,566.75 and you may, if you wish, use CPA's Pay Later Plan. For further information simply send the coupon to: Tour Dept., Canadian Pacific Airlines, 1170 Hornby Street, Vancouver 1, B.C.

Gentlemen: Please send me further information on the "Teachers' Tour of the Far East".

☐ I would also appreciate details on CPA's Pay Later Plan.

Name.....

Address.....

City.....

**CANADIAN PACIFIC AIRLINES**

# WHY?

# WILLIAMS LAKE SCHOOL DISTRICT

## *BECAUSE*

- if you are interested in the FREEDOM to teach, this school district was meant for you. It is no accident that District 27 is recognized as one of the educational leaders in the province. The atmosphere was created by design.

- here you will find the educational climate invites and encourages the initiative to try new ideas and new methods in a modern approach to education. Here a teacher feels important because he is recognized as a member of a profession that is important.

- you will find the new approach has not been confined to theory. Modern buildings and the finest in equipment and teaching aids have been provided to make the new concept workable. We use department heads in larger schools and make use of para-professionals.

- this is a growing area of the province. Population increase from 1961 to 1966 in the town of Williams Lake was 49.4 per cent. This means an exceptional opportunity for advancement. It also means you are working with young, forward-thinking staff members. The average age of teachers in District 27 is 28 years.

- outside of the classroom you will find the Cariboo a wonderful place to live. Winter and summer it is the playground area of British Columbia. It is called "the big country", and once you have travelled over its vast park lands you will agree that it is indeed the Big Country.

- the two major communities of Williams Lake and 100 Mile House provide all the services and recreational facilities one might wish. If you have a family you will particularly like the prospect of raising your children in this still-unspoiled part of British Columbia. In the major centres, extensive junior programs are carried out in skating, hockey, curling, skiing, riding and swimming.

- our salary scale is among the best in the province, with special attention given to the professionally qualified teacher.

SCALE — MIN. MAX.

| EC | EB | EA | PC | PE | PB | PA | PA (Masters) |
|---|---|---|---|---|---|---|---|
| 4420 | 4820 | 5330 | 5850 | 6060 | 6700 | 7170 | 7600 |
| | 7195 | 8165 | 9425 | 9635 | 10780 | 11590 | 12020 |
| | x8 | x9 | x11 | x11 | x12 | x13 | x13 |

***We Invite You To Enquire Early About Vacancies***

District 27 recruitment team members will be available a number of times this spring to give you further information on the district with the forward look in education. Please watch for the advertisements in the daily paper. Meanwhile:

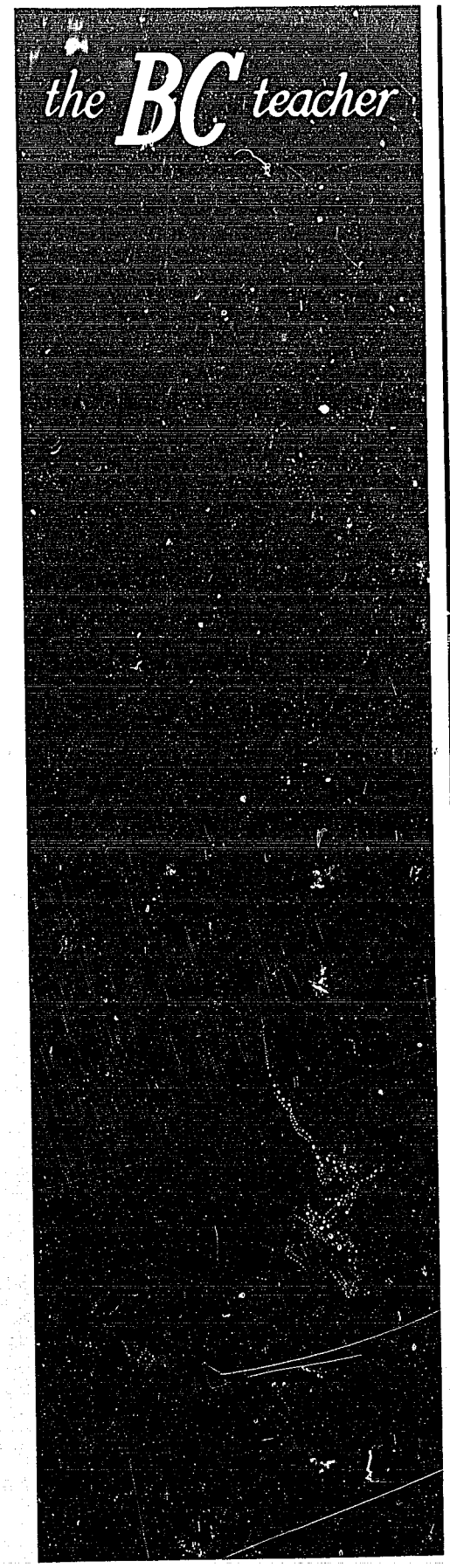
**Vancouver, Hotel Vancouver,**
**Feb. 22, 23, 24**
**March 12 — Trustees Day**
**April 15-17 — Easter**

**Victoria**
**March 11 — Trustees Day**

**Penticton**
**April 15-17 — Easter**

***Address enquiries to:***

**Mr. R. E. Flower,**
**District Superintendent,**
**School District 27**
**P.O. Box 790**
**Williams Lake, B.C.**




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

Volume 47, No. 5 FEBRUARY 1968



**COVER PICTURE**

This month's picture is the work of Louis Crout, a student of John Oliver Secondary School, Vancouver. Of his lino cut he says, 'I like a tree—she mirrors man's triumphs and defeats—moments of bliss and agony. The easiest way to draw oneself is to look into a mirror.'

**PHOTO CREDITS**

P. 188—B.C. Govt. Photograph; p. 189—Divn. of Visual Education; p. 190—Ashley & Crippen (loaned by Simon Fraser University); pp. 191, 198—from *Teach Me!*, National Education Assn.; pp. 194, 202, 204—Sam Wiebe; pp. 205, 206—supplied.

special low fares to Europe, the Caribbean and beautiful world by spending less to get there.

# you fly with AIR CANADA

## FLORIDA & THE ISLANDS

**8** **21-DAY ECONOMY CLASS EXCURSION** — Fly South to a sun-soaked holiday and save up to 20% on Air Canada's low summer rates. Miami, Tampa/St. Petersburg, or choose your island —Air Canada serves Bermuda, the Bahamas, Jamaica, Antigua, Barbados, Trinidad & Tobago. Sample round trip fares:
Montreal to Barbados: **$230.** Toronto to Trinidad: **$250.** Vancouver to Jamaica: **$336.**

**9** **ISLAND HOPPING HOLIDAYS** — Why see just one island, when you can visit several on a 16-day Island Hopping Holiday. Air Canada offers you a choice of three all-inclusive tours. Each takes you to a different group of islands, and you fly for much less than you'd expect.
The Buccaneer Tour: Jamaica and the Bahamas **$337.**
The Creole Tour: Antigua, Martinique and Guadeloupe **$328.**
The Calypso Tour: Trinidad, Tobago, Barbados and Grenada **$293.**
(Prices are quoted per person, double hotel room occupancy. Air fare extra.)

## NORTH AMERICA

**10** **GROUP TRAVEL** — Have lots of foot-loose friends? Get ten or more of them together. Then go anywhere in Canada or the United States on Air Canada's Group Travel plan and save up to 17% on Economy Class fares. If you wish, you can come back separately. Sample group fares, round trip — per person:
Montreal to Tampa: **$138.** Toronto to Calgary: **$156.** Vancouver to New York: **$232.**

**11** **AIR CANADA'S FAMILY FARE PLANS** make it a lot easier for you and your family to travel together, anywhere in North America. For full information on fare discounts for wives and children, call Air Canada, or see your Travel Agent.

Want more details? Here's a list of Air Canada's special fares. Check off the one(s) which interest you, and mail to
Air Canada,
P.O. Box 598,
Montreal 3, P.Q.

**EUROPE**
- ☐ 14-21 Day Economy Excursion
- ☐ Summer Season Economy Fares
- ☐ Thrift Season Economy Fares
- ☐ 14-21 Day Individual Tour-Basing Fares
- ☐ 14-21 Day Group Inclusive Tour Fares
- ☐ Affinity Group Fares
- ☐ Extra Cities Plan

**FLORIDA AND THE ISLANDS** 1 OCT '63
- ☐ 21-Day Economy Class Excursion
- ☐ Island Hopping Holidays

**NORTH AMERICA**
- ☐ Group Travel
- ☐ Family Fare Plans

Name_____
(PLEASE PRINT)

Address_____ Apt.____

City_____ Zone_____ Prov._____

# WHY ARE WE IGNORING TELEVISION?

TELEVISION IS ONE of the most effective means man has ever developed for communicating with his fellows. Few will disagree that it has effectively conveyed to millions of people information they would probably not have obtained in any other way. Why, then, have we been so slow to use TV in our schools to assist with the information-giving aspect of education?

The main reason has probably been cost, or at least fear of what costs could become. If so, it is a poor reason; TV in schools need not be prohibitively expensive.

We suspect that most school boards and many teachers have thought of TV in terms of *producing* programs rather than in terms of *using* them. This line of thinking has been reinforced by the fact that the few districts which have experimented with educational television have, for the most part, attempted to produce programs as well as to use them.

Producing television programs *can* be expensive. Producing first-class television can be very expensive. We need look no farther than the CBC or commercial TV networks for proof of that contention. But do schools need to produce programs to benefit from TV? We don't think so.

Television is no cure-all for the problems of education, but it can be a very useful and effective teaching aid, just as films, film strips, models, overhead transparencies and a host of other aids are. Why can't we use TV the way we use the other aids—by using the materials already produced?

No one suggests, for example, that a motion picture projector is of no use unless a school or school district produces its own films. Why, then, must schools await TV production facilities before being equipped with TV sets?

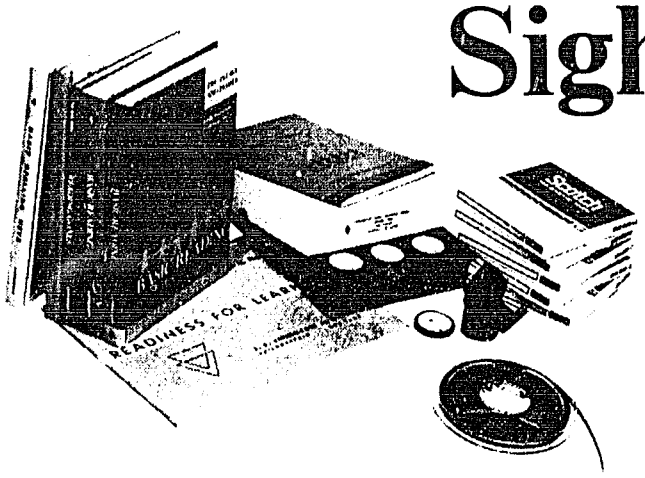
All a school district needs to make effective use of television is a videotape recorder for recording useful programs (so that they may be used when they are needed, not merely when they are broadcast), a means of broadcasting or circulating those programs to schools, and TV sets to receive the programs in the classrooms. There is no lack of good programming available from School Broadcasts, the CBC and the commercial networks. Any doubts about this can be dispelled by referring to the districts which now use TV.

A central agency could be set up in Vancouver to provide a taping service for all school districts. There is no reason why each of the districts should tie up all year a tape of a program which may be useful during only a few weeks of a year. The central agency could have a master tape and could dub tapes for the school districts as and when required. Later perhaps, if deemed advisable, the agency could venture into TV production, using the facilities and TV professionals available in Vancouver. This arrangement would avoid the unnecessary duplication of production facilities which would result if each school district ventured into television independently.

Lest we be misunderstood, we are not suggesting that it is wrong for school districts to undertake their own TV production if they want to do so. There are many useful things TV cameras can do to improve learning experiences. Our point is simply that schools can use TV effectively even if there are no production facilities whatever in a district.

Television has been a potent force for almost two decades. Our students have been learning much from it outside of school. Isn't it about time they started learning from it in school too? □

# Sight and Sound




**Both essentials to the basic programs of Reading and Spelling are provided by Lippincott—with some new additions in the sound department!**

## Basic Reading

**Grades 1-8**
**by Dr. Glenn McCracken and Dr. Charles C. Walcutt**

The successful integration of phonics and linguistics is the secret of BASIC READING. Children are guided to mastery of the essentials of word-analysis and language decoding and are well on their way to full reading independence long before the end of Grade 1. No longer confined to strictly controlled vocabulary, BASIC READING classes consistently score as much as two full grades beyond normal expectancies.

BASIC READING brings the classics back to the classroom, too. Children using this series are able to work toward improving literary appreciation, critical and analytical reading, and a wide range of important techniques for understanding and using language.

## Reading Goals

**(1966-1967)**

Extended readers by Dr. McCracken and Dr. Walcutt are now available. These colourful, inexpensive supplements provide additional vocabulary experience, review and reinforcement for Pre-Primer and Primer pupils.

## Basic Reading Filmstrips

The series of basic filmstrips developed for use with BASIC READING, Grades 1 through 3, are called BASIC READING TEXTFILMS. They are designed to teach reading by supporting the text and workbook class activities, and by providing additional opportunities for demonstrations and exercises by the teacher and the pupils. TEXTFILMS save the teacher time, too, since all children participate simultaneously in each learning experience.

## The Talking Teacher

**NEW**

In response to the requests of many teachers using Lippincott's BASIC READING, we are pleased to announce a correlated audio program which helps teachers introduce the sounds of speech in relation to spellings. THE TALKING TEACHER has been designed for use with either the Pre-Primer text or filmstrip, and the 16-page Teacher's Manual provides the correlations for each. The style is free and easy and the voice is that of an experienced primary grade teacher. The tapes, a complete teaching unit in themselves, are sold only in full sets of 5 tapes. They may be played on any tape recorder which will take 5-inch reels and has a playing speed of 3¾" per second. Available on 30-day approval.

## Basic Spelling

**Grades 1-8 (Revised, 1967)**
**by Dr. Theodore E. Glim and Dr. Frank S. Manchester**

Now available in a sparkling new 1967 multi-ethnic edition in both textbook and textworkbook form, BASIC SPELLING uses a linguistic approach to teach spelling and develop a full range of related language arts skills. The Teacher's Editions have been revised for even greater teacher convenience and classroom efficiency. Manuscript and cursive writing are taught, and word families, structural analysis, dictionary skills, and word study techniques are heavily emphasized.

## READINESS MATERIALS

### Readiness for Learning Workbook (1965)

**by Pierce H. McLeod**

Designed for use in late Kindergarten or in the early months of Grade 1, this program develops readiness in three sequential stages—large-muscle exercises, unilateral control activities, and refined manual and perceptual skills essential to the learning process. A tachistoscope and a plastic practice overlay are included. Upper and lower case manuscript and letter- and word-formation are taught through cue-reduction exercises.

### The Lippincott Reading Readiness Test (1965)

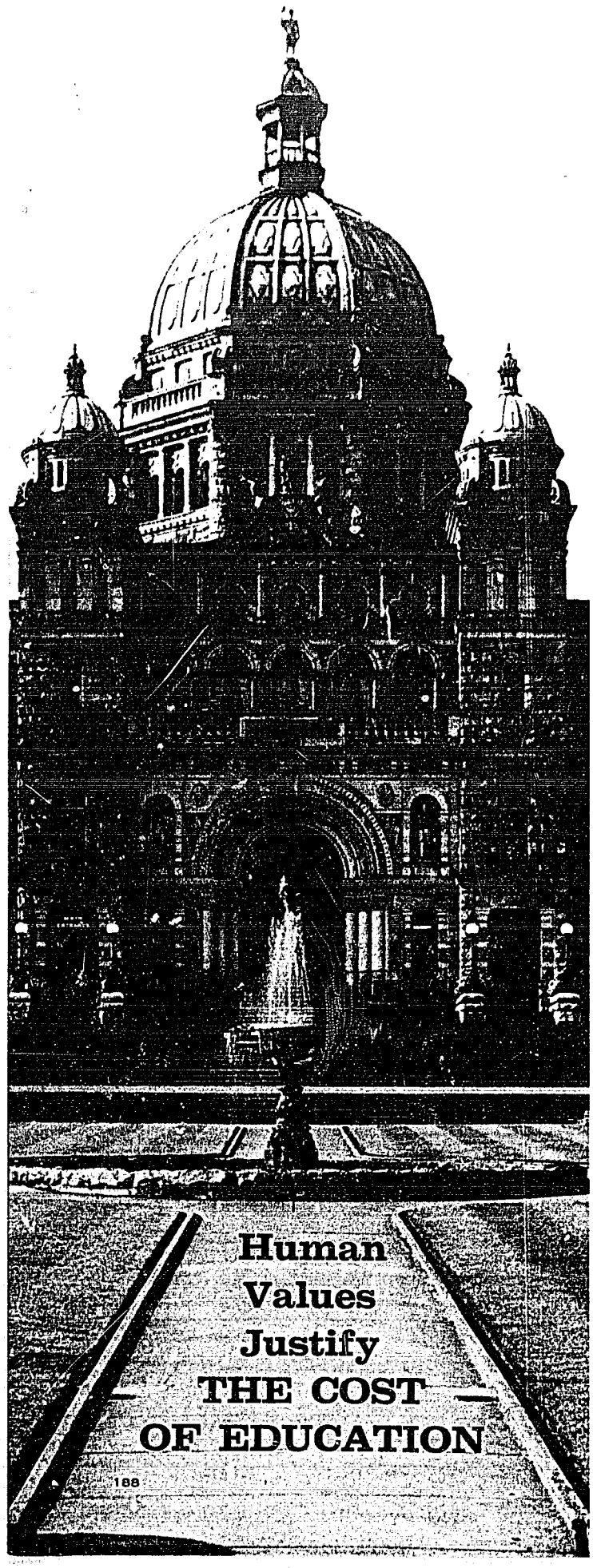
**by Pierce H. McLeod**

Here is an effective, simple-to-administer test which provides the teacher with full information on pupil readiness that may be used as a guide for placement, evaluation, diagnosis, and parental counseling. It is invaluable in the detection of emotional, social, or perceptual problems, for which a Readiness Check List is provided.

## McCLELLAND AND STEWART LIMITED

*The Canadian Publishers*

**25 Hollinger Road, Toronto 16, Ontario**




J. A. SPRAGGE

DISCUSSIONS ON EDUCATION FINANCE tend in the main to be concerned with two issues: the total amount which can justifiably be expended on education, and the means by which responsibility for supply of these funds may be equitably shared.

My concern is a third issue, so subtle in nature that it tends to be overlooked, yet of crucial social significance. I shall identify it as the complex relationship between financial decisions and basic philosophy in education.

Ideally, a society's first decision in education should be philosophic. We should start by establishing clearly defined goals. What objectives should our education system be designed to attain? Among a variety of objectives, what is our order of priorities? What learning processes are appropriate in terms of these objectives and of this order of priorities? What forms of organization are most likely to foster the appropriate learning processes? What personnel, what physical plant, what equipment and supplies, are essential to create the required learning environment?

Having found acceptable answers to these basic educational questions, we should at least be well on the way to determining how much we must spend, and we should have some valuable clues as to how the cost impact should be shared.

Ideally, philosophic decisions should be made by philosophers. Or at least, if the citizens of a democracy adhere to the democratic principle that decisions affecting all of the people must be made by the people or their elected representatives, surely those representatives should seek the counsel of philosophers in matters philosophic.

To identify the philosophers is not easy, for in our society the practice of philosophy tends not to be a specific vocation. Nevertheless, we should be vigilant to ensure that basic philosophic decisions are not arrived at by accident, by default, or as by-products of more superficial considerations.

Our record of performance is somewhat at variance with these ideals. A few random examples will illustrate what I have in mind. In B.C., we staff our elementary schools on the basis of one teacher to 36 pupils; our secondary schools on the basis of one to 30; we provide our universities with academic staff in the approximate ratio of one to every 18 students. This arrangement may be quite right, or it may be very wrong. The point is that I am unaware of any philosophic study which supports it.

Canada's total expenditure on university education increased fivefold in the decade 1955-1965. During the same period our expenditure on vocational training increased fourfold; and on public elementary and secondary education, two and one-half times. These

---

*Mr. Spragge is Assistant Director of the BCTF's Division of Professional Development.*

disparate growth rates do not reflect a carefully planned, research-based system of social priorities.

Provisions of the BNA Act notwithstanding, the Government of Canada participates to some degree in both the financing and the operation of our education system. Its financial contribution is concentrated in four specific fields: education of the children of service personnel, education of Indians and Eskimos, vocational training, and post-secondary education. What commission of competent social philosophers was ever engaged to advise the federal representatives of the people that federal participation is appropriate in these fields and in no other?

Each university in B.C. is, nominally at least, autonomous; its academic affairs are managed by its Senate and its budget by its Board of Governors. Elementary and secondary schools, similarly, are under the autonomous control of district school boards. So, too, are the colleges. Our network of vocational schools, on the other hand, is centrally controlled by the Department of Education. I have failed to find any philosophic justification for this odd organizational arrangement.

I think perhaps I have made my point. Decisions of crucial importance in education are constantly being made, by governments at all levels, on the basis of tradition, of prejudice, of snap judgment, of expediency, of pressure, of panic: in short, on any basis except philosophic deliberation.

I have already admitted, in an oblique way, that in a democracy basic social decisions will inevitably be made by politicians. I neither sneer nor wince as I affirm this fact; it is the very essence of democracy. It is incumbent upon us, however, to understand the manner in which politicians reach their decisions, and to govern ourselves accordingly.

In the absence of deliberately sought, formally structured advisory services, politicians will react to random stimuli, and each of their decisions will reflect a sort of spontaneous synthesis of random reactions. In educational matters, many of the stimuli will originate with teachers and their representatives. We must do our utmost to avoid providing random stimuli which may contribute to political decisions that are philosophically unsound.

To put the case in positive terms, we must see to it that every impact we make on political thinking is consistent with sound educational principles. This is no easy task, for the unanticipated side effects of what we do or say may often prove to have disproportionate impact.

In our zealous quest for adequate funds for education, we are sometimes inclined to embrace too readily some ingenious tactic which promises powerful immediate support for our cause but which may have a disastrous eventual impact on the direction of political thinking.

One such tactic is the investment-return concept of educational expenditure. In one of its forms, development of this concept starts with quotation of statistics, undeniably valid, that the average annual income of elementary school graduates is X dollars, of secondary school graduates Y dollars and of university graduates Z dollars. Statistics are added to show that the average unemployment rate among elementary school graduates is p percent, among secondary school graduates q percent, and among university graduates r percent.

The conclusion is simple and direct. Since Z is greater than Y and Y greater than X, and since p exceeds q which exceeds r, all by significant amounts, we must obviously provide all of our children with maximum educational opportunity, so that more and more people may earn larger and larger incomes, our affluent society may become more and more affluent, and we may all live happily ever after.

**Although B.C.'s universities are autonomous, and our elementary and secondary schools are under the jurisdiction of largely autonomous school boards, the vocational schools are centrally controlled by the Department of Education.**

In a more sophisticated form, the same thesis is developed by analyzing the rate of increase over a period of years in the Gross National Product. After crediting appropriate amounts of the increase to such factors as population changes, technological advances and capital investment, a substantial increment remains unassigned. Since we cannot account for it in any other way, this productivity increment is deemed to be a concrete return on society's investment in education. Though statistically tenuous, this argument seems through its very ingenuity to win admiration, if not whole-hearted acceptance.

In either form the investment-return concept is a useful device to make expenditure on education more palatable. Unfortunately, its undesirable side effect is already apparent. With its emphasis on education as a means to a purely materialistic end, it tends to cloud the concept of education as a means to spiritual ends, and to obscure altogether the concept of education as an end in itself. Consequently, we see increasing emphasis on science, on vocational shop training, on that which prepares one to make a living and we see increasing neglect of all those things which prepare one to live. We see massive infusions of money into those university faculties which are glorified trade schools, and comparative penury for those which nurture the human spirit. Reacting in predictable fashion to our insistence that education is a dividend-producing economic enterprise, political decision makers award top priority to those forms of education which yield direct, concrete, recognizable dividends.

I am convinced that direct economic return is by no means the most important outcome of education. The crucial problems of our times are not problems of economic productivity or technological skill; they are problems of human relationships. Dr. George Gallup, of Gallup poll fame, is not only a skilled statistician, but also a remarkably thoughtful social analyst. Here are some of his comments on the current state of human affairs.

*Human variability and adaptability, which go far toward explaining man's biological ascendance, will always operate to produce individuals who differ widely in ability. Some individuals will always stand far out above the mass. The surest way of producing such great thinkers is to raise the general level from which they must spring.*

*It is inconceivable that we can reach a higher state of civilization without the further development of our intellectual qualities. In fact, even though we can take great satisfaction in the progress we are making in many fields, particularly in science, we have no reason to be content with our lot. Our achievements in many fields have been meager and unexciting. It can even be argued that we have fallen below the level of excellence of Renaissance days in many of the humanities. Certainly, a good case can be made that modern man does not use his intellectual powers to any greater extent than did the citizen of ancient Greece. He enjoys far more wealth and comfort and greater freedom from disease, yet modern man shows no evidence of being able to manage his own life with greater intelligence than did his ancient forebears. Nor does he solve the problems that face society in his day with markedly greater skill than earlier generations.*

If Dr. Gallup is right—and I think he is—we must pay much greater attention in education to the development of social concepts which will enable man to live in harmony with man, group with group, race with race, and nation with nation. We must also equip our young people to cope adequately with the one unique phenomenon of their world—the phenomenon of rapid change. Here again is Dr. Gallup on the subject of change.

*The thinking of civilized man has always been oriented to the past. He studies history to understand the present and to predict the future—but his thinking seldom reaches that far. In a very real sense he backs into the future; he most certainly does not face it. In the whole history of man, no generation has been taught to expect change, to be prepared for change, or to seek change.*

*The penalties for instituting—or even advocating—change can be severe. Leaders risk their positions of leadership. The leader who advocates radical change is almost certain to incur the wrath of other leaders in his field. In fact, it is the leaders who typically become the most bitter and the most effective foes of change. The public, therefore, must take the initiative and assume responsibility for progress in the affairs of man. The public must force change upon its leaders.*

*The hope of the future rests with the citizen. To be effective, he must be well informed, and he must discover ways of making better use of his own great mental capacities and those of his fellow men. In the words of Woodrow Wilson: a nation is as great, and only as great, as her rank and file.*

Here, then, is a truly significant challenge—to educate for social change, to the end that man may learn to manage his affairs with wisdom. As Dr. Gallup emphasizes, this objective implies development of the intellectual competence of the entire population, not merely of a select group of gifted leaders.

I have suggested that the social outcomes of education are of more pressing importance than its economic consequences. I shall now go a step farther and indicate a case for education, not as a means, but as an end in itself. To quote Dr. Gallup again.

**Marshall McLuhan is one of Canada's great thinkers and epitomizes those individuals who stand far out above the mass. But to educate for social change implies development of the intellectual competence of the entire population—a significant challenge.**


**A greater gift than any material one is surely a joyfully inquisitive mind, eager to learn and skilled in the art of clear, incisive thinking.**

*Like all the activities in which man engages, thinking can be work or it can be fun. Reading a book, discussing an important issue of the day, visiting a museum, can be work or can be fun, depending upon one's point of view. The tragedy of modern man is that thinking is not widely regarded as one of the pleasures of life, as it was at one stage in early history.*

Two factors that seem inevitable in the future lives of our younger generation are an increasing amount of uncommitted time and an increasing degree of loneliness. The first of these factors is so generally recognized as to need no supporting argument; the second may come as a bit of surprise. Consider, however, the decreasing size and stability of family units; the increasing mobility of people and of their employment; the rapid trend from the small, intimate community to the large urban environment. All of these trends are placing more and more people in situations where they live among strangers and must draw upon their own inner resources for their emotional stability and happiness. I have said that a crucial problem of tomorrow is man's ability to live with man; even more essential is his ability to live with himself. Perhaps the primary outcome of education, therefore, is the development of a wise, stable, versatile, creative self.

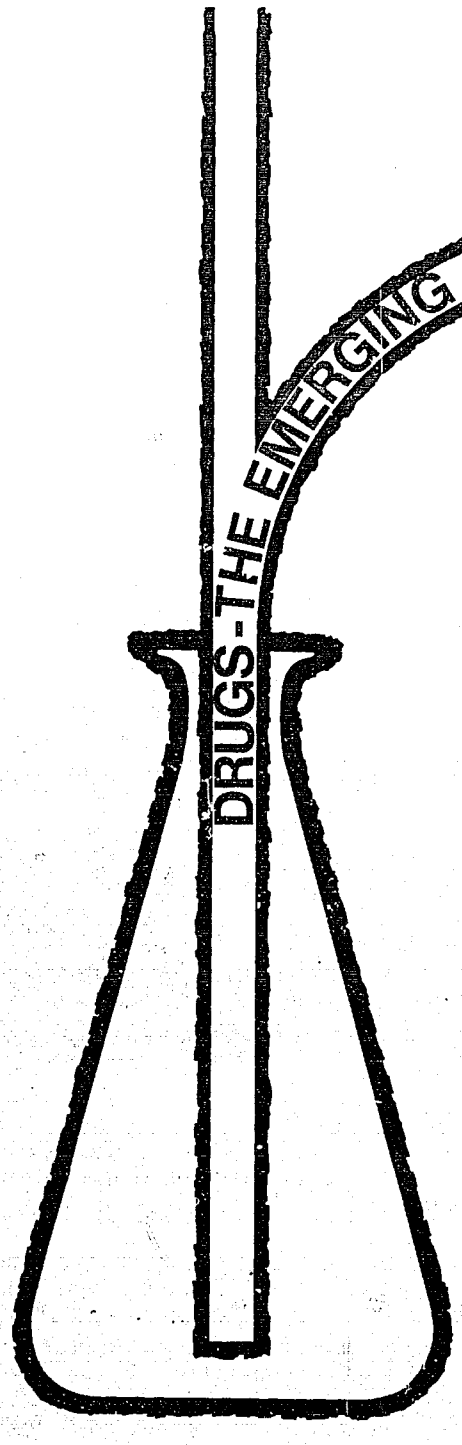
Two important outcomes of education, then, are social competence and personal adequacy. Neither is directly measurable in terms of the investment-return concept of education, yet both are ultimately more significant objectives than any form of material enrichment.

To advocate adequate support of education on the ground that it is, in part, an economically productive enterprise is a sound tactic, if kept in proper perspective. We must not inadvertently reinforce the position that economic gain is the sole object, or even the primary object, of education. We must lay major and continuous stress on education as a priceless asset in its own right.

As the basis of a plea for funds, my position is perhaps a little abstract, but not necessarily ineffective. In many ways the modern parent's generosity toward his children is manifest. He gives them the best of health care, expensive cosmetic orthodontal treatment, angora sweaters, portable television and the keys to the family car. He wants for them and will buy for them the very best in vocational preparation. We surely believe that a greater gift than any of these is a joyfully inquisitive mind, eager to learn and skilled in the art of clear, incisive thinking.

Surely we must communicate this conviction, lest we find that we have traded our children's birthright for a mess of sterile vocational training.□

# DRUGS-THE EMERGING GENIE OF LEARNING?



IMMENSE IMPLICATIONS FOR education lie in recent great discoveries in molecular biology relating to the mysteries of consciousness, memory, learning, and other mental processes.

To explore these implications, I/D/E/A, the action-oriented division of the Charles F. Kettering Foundation, recently sponsored a Seminar on the Chemistry of Learning and Memory, with Professor Holger Hyden, the Swedish neurobiologist, as chairman. This report summarizes the dialog that grew out of Professor Hyden's opening questions: Where do we stand in applying our growing knowledge of the chemistry of the brain to the education of the young? Are we near to the time when it will be possible to transfer learning from one being to another?'

An important fact already known about the chemistry of the brain is that it is changed by experience, including the experience of learning. David Krech of the University of California has demonstrated that rats placed in an enriched environment, with ladders, platforms, bells, and the like, are smarter at solving problems (e.g., learning to go through a maze) than litter-mates reared in the usual drab laboratory cage. The enriched environment causes chemical and anatomical changes in the rats' brains that appear to be associated with their greater intelligence.

It is not just experience in this gross sensory sense that changes the brain, however. Experiments by Professor Hyden suggest that the act of learning itself sets in motion a specific biochemical process which alters the protein-RNA (ribonucleoprotein) structure of the brain in a specific way. Hyden's approach is to establish a new behavior in animals, e.g., teaching them right- or left-handedness, and then to extract their brain cells. Analysis has shown that the RNA molecules in the brain of a trained animal are different from those in the brain of an untrained animal. The crucial biochemical process in learning appears to be a change in the way the brain synthesizes protein and RNA.

The relationship works both ways. Changing the biochemical functioning of the brain appears to change an animal's ability to learn or remember. Bernard Agranoff of the University of Michigan teaches goldfish to swim over a hurdle and then injects puromycin, a chemical which suppresses protein synthesis, into the brain. If the chemical is injected within an hour, the learning is destroyed; if the injection is delayed more than an hour, memory is unaffected. The results suggest a distinction between the *formation* of long-term memory, which apparently requires protein synthesis in the brain, and the *maintenance* of long-term memory, which apparently does not. It would also appear that the formation of long-term memory occurs within a finite period.

If formation of memory is dependent on RNA-

---

*Reported from* The Chemistry of Learning, an I/D/E/A Occasional Paper, *1967, published by the Institute for Development of Educational Activities of the Charles F. Kettering Foundation, and reprinted with permission from the November 1967 issue of* The Education Digest.

mediated protein synthesis, might not memory—hence learning—be enhanced by stimulating such synthesis? Researchers are trying to do just that. James McGaugh of the University of California at Irvine injects strychnine and other drugs into rats just before, during, and after they are taught to run a maze. Learning and long-term memory appear to be greatly facilitated if the drug is injected within 15 minutes before or after the learning occurs. Other drugs, he reported, enhance or suppress short-term memory without affecting long-term memory, supporting the view that these are quite different processes.

Nicholas Plotnikoff of Abbott Laboratories is conducting behavioral experiments in animals with a mixture of pemoline and magnesium hydroxide, which appears to enhance learning and memory in animals. Testing of the drug in humans has already shown interesting clinical results, including preliminary indications that it may enhance memory in pre-senile aged persons.

The gist of the matter is that it may now be possible to increase the capacity of learning through drugs; but so far there has been too little co-ordination between educators and the medical profession. Educational theorists continue to rely on the obsolete stimulus-response learning theories as the key to the learning process.

James V. McConnell of the University of Michigan and William L. Byrne of Duke University have made some provocative experiments in the controversial field of 'memory transfer' by injection. Brain materials prepared from trained animals were injected into untrained ones, suggesting—but not yet conclusively proving—that learning can be transferred in this way. Although skepticism to this radical approach has been fortified by the lack of reproducibility of earlier reports, some of the skepticism seems to stem from the fact that the experiments are not entirely compatible with current theory. But which is wrong: the experiments, or the current theory?

At the moment, the implications for education must remain tentative, for the knowledge about the chemistry of the brain is itself very tentative. For one thing, almost all the research is still being conducted on animals, and there is some disagreement over its precise applicability to man. For another, the new facts and the new ways of thinking about them do not yet add up to a coherent picture or theory of how the mind works, how learning occurs, how memory is established and maintained. Indeed, Professor Hyden warned, it is essential to remember that what scientists observe is not nature itself, but rather their own examination of it; their techniques are interposed between them and nature.

And yet there seemed little doubt in the seminar group that in the foreseeable future a coherent picture of how the brain works *will* emerge. The most exciting, and in many ways the most frightening, implication of this stems from the expectation that *the day will come when we can alter the intellectual capacity of children, and maybe of adults, through the use of drugs.* That day, the group seemed to agree, will in all probability come within 10 years, since we are likely to develop chemical or pharmacological means for enhancing learning before we fully understand the biochemical processes of the brain. Eventually, there may be a whole arsenal of drugs, each affecting a different part of the learning process, e.g., acquisition of information, short-term memory, long-term memory.

The social and educational consequences are awesome to contemplate, and if we are to maintain any kind of control over the drugs, we must try to anticipate a variety of possibilities. For example, the social consequences will be radically different according to whether the drugs increase just the *rate* at which people learn or their total *capacity* to learn as well. The consequences will be profoundly different, too, if these drugs enhance learning more or less equally across the entire IQ spectrum, for instance raising every youngster's IQ by 10 points, rather than in only one part of the spectrum. Some participants thought that drugs will be effective mainly in bringing the dull and/or retarded closer to the norm. Others seemed to think the response to a memory-enhancing drug may vary according to the individual's past experience or genetic makeup.

Over the long run, however, the most profound effects of research in brain chemistry may come not from the development of 'learning drugs' but from the deeper understanding of how learning occurs and why it sometimes does not occur.

It is now clear that learning cannot be understood in terms of any simple relation between stimulus and response or stimulus-response reinforcement.

The panelists seemed to agree that what has passed

Continued on page 211

**Teachers recognize that pupils vary in achievement in reading and group them for reading instruction. They should be aware of the difficulties pupils will encounter in other textbooks. Darlene Swanson and John Sanderson, of Lord Tennyson Elementary School in Vancouver, illustrate the dilemma of such pupils.**

A FREQUENT COMPLAINT of elementary teachers of mathematics has been that, while students have generally been able to master the computational skills associated with a particular grade level, their ability to cope with the problem-solving facet of the arithmetic curriculum falls far short of their prowess in computation.

Further discussion of this problem usually reveals that in a classroom situation, when the teacher reads the problem aloud to the class and elicits suggestions for its solution, the difficulties in problem-solving do not appear to be as frequent or as acute. The stumbling blocks appear when students are assigned to solve problems they have to read independently.

The problem, then, may be neither one of lack of computational skills nor lack of understanding of mathematical concepts, but one of readability, i.e., the reading difficulty levels of the arithmetic text itself—or more specifically a disparity between the readability of the text and the reading ability of the student.

In an attempt to clarify this reading problem in arithmetic we carried out a study which compared the reading ability of the students from three Grade 6 classes in a Cranbrook school with the readability level of the arithmetic text in use at the Grade 6 level.

*Mr. Lee is associate professor at Western Washington State College, Bellingham, and Mr. Phillips is vice-principal of T. M. Roberts Elementary School, Cranbrook.*

In October 1966 the Gates Reading Survey was administered to the three classes, comprising 100 students. The results of this survey are contained in Table 1. The average grade score ranged from Grade 4 to Grade 10.9, a range not unusual at the Grade 6 level.

TABLE 1

Average grade scores of 100 Grade 6 students as measured by Gates Reading Survey.

| *Average grade score* | *Number of students* |
|---|---|
| 10.0 - 10.9 | 1 |
| 9.0 - 9.9 | 6 |
| 8.0 - 8.9 | 6 |
| 7.0 - 7.9 | 20 |
| 6.0 - 6.9 | 37 |
| 5.0 - 5.9 | 23 |
| 4.0 - 4.9 | 7 |
| | 100 |

The arithmetic text was analyzed by the Dale-Chall Formula for Predicting Readability.[1] The samples for analysis were chosen at 28 page intervals. The choice of such intervals has been justified by Martin and Lee.[2] The results of the 10 samplings are reported in Table 2.

Note that the mean readability grade level is 6.6,

WAYNE D. LEE and T. A. PHILLIPS

# If they can't read they can't do arithmetic

TABLE 2
Readability grade level predictions yielded by 10 random samples taken from Grade 6 arithmetic text as measured by the Dale-Chall readability formula.

| *Sample* | *Reading grade level prediction* |
|---|---|
| 1 | 5.2 |
| 2 | 5.4 |
| 3 | 6.0 |
| 4 | 4.8 |
| 5 | 7.6 |
| 6 | 6.6 |
| 7 | 8.8 |
| 8 | 8.8 |
| 9 | 5.4 |
| 10 | 8.6 |

Range 4.8 to 8.6
Mean readability grade level prediction 6.6.

but the readability levels range from a low of 4.8 to a high of 8.8, or a spread of four grade levels.

In making comparisons of the reading achievement of these students with the readability levels of the text, one may assume that when confronted with such reading material as was found in samples 7, 8, and 10, more than 87% of the students will have difficulty in *reading* the problems. At least 30% of these students will have reading difficulties in tackling *any part* of the text.

If we assume that the results of the reading survey have yielded the highest grade score that each student could achieve—i.e., that each student did his utmost on the test—what we have measured is the level of frustration in reading for each student. If this be the case, the problem is even more serious than the previous paragraph suggests. When a student is doing individual work in arithmetic, or any other subject, the readability level of the text should match his *independent* level of reading.

Assuming that this is a typical sampling of Grade 6 students in the province—and the reading achievement scores support this assumption—a Grade 6 teacher of arithmetic, knowing the reading achievement level of each of the students in his class, can anticipate which students are going to have difficulty with independent problem-solving.

## Conclusions

When curriculum committees are faced with the task of choosing a textbook for any subject at any grade level, they should take into account not only the content of the text but also its readability level.

While the practice of grouping for reading instruction is common in elementary classrooms because teachers recognize the varying levels of pupil achievement in reading, teachers should be aware of the reading difficulties pupils will encounter in texts other than basal readers. They should realize that the difficulty of the text will vary greatly from chapter to chapter and even from page to page. This means that teachers have the responsibility of giving individual help in reading in arithmetic, science and social studies lessons to the same extent that they customarily give individual help in reading lessons.

We suggest that the practice of introducing new vocabulary at the beginning of a reading lesson be carried over to all subjects where textbooks are to be read. □

*References available on request.*

# OUR SCHOOL SYS

ROBB W. WILSON

*The writer states, 'To provide something different, and I think very controversial, I have written this article which I suggest you publish without any timid apology. Then, may I suggest you ask for articles from other teachers with ideas which are new.' Here is the article. We welcome manuscripts at any time.*

THERE IS A GREAT DEAL wrong with our education systems in Canada. Who is to blame? What can be done?

We have in Canada many dedicated and sincere teachers who do their best to set up adequate learning situations in the classrooms. These teachers are hampered in every step by a most antiquated and stupid educational system. Also, the administration, on the whole, leaves a great deal to be desired.

The chief reason for the continued use of the obsolete system is the basic belief by the public that schools should be run in a democratic way, or that schools should continue to be the sole responsibility of the church. Couple this with the established concept that everyone can be an expert on education, and you have a mess which takes a lot of hard work to clean up.

The church has moved away from its complete authority in most of Canada and has insisted only on the right to have religious training. However, in giving up its rights, it has passed on the control to trustees, who in so many ways are less capable of running schools than the churchmen.

The attitude of the church toward its control of education 100 years ago led to the need for the decision expressed in the British North America Act that the provinces should have the complete charge of education. This term of the BNA Act served a very useful purpose in bringing about federation, but it has been also one of the main reasons why Canada has not become a real federation.

With the spotty settlement in Western Canada there was a need for the little local school with local control. This was satisfactory for the times. However, as soon as the population thickened and adequate roads made quick communication possible, there was no need to continue this system. When larger units were suggested in the 'dirty thirties' many people fought to keep the small school district with the petite teacher under the direct control of the three wise men. The only qualifications needed to be one of these wise men was to be able to read and write. Some had difficulty meeting these requirements.

Many teachers from Saskatchewan tell of teaching in a one-room school with 50 pupils in Grades 1 to 10. In their spare time they coached all the local sports, led the drama group, and, if female, fought off the local big lover, who just might be the son of the chairman of the school board.

Conditions did improve with the advent of larger school districts, for there could then be a certain amount of broad planning. Men and women with better qualifications offered themselves as trustees. This was good in a way, but political opportunists saw in these boards excellent stepping stones in their political careers. When they got on the boards they had more interest in future votes than in providing good educational opportunities.

I must comment here that there have been (and still are) thousands of dedicated trustees who have sacrificed a great deal of their time and energy for the good of education in their districts. The fact was that they were not trained for the job, and the many booboos they made were made in the sincere belief that they were doing well.

Although I shall be classed as undemocratic, I shall say what I believe—the day of the trustee should be ended. The schools should be administered by professionally trained administrators *who should not be teachers.* They should not have to spend time in learning teaching methods or in working their way up from a classroom. There should be a whole system starting with the manager in a school to the chief administrator in a very large district.

Two quesions arise at once. The first—who is to have the say as to how money should be spent in education? I say that the province should be the smallest unit to collect and allot monies for this purpose. This arrangement would get away from the outdated method of levying direct taxes on property for education. It would allow for equal quality of buildings and equipment in all districts. It would take away the

*Mr. Wilson teaches at Carson Graham Sr. Secondary School, North Vancouver.*

# TEM IS OBSOLETE

stupid business of building schools by guess and by damn.

I know of a two million dollar school in B.C. which is in the final stages of building; the rooms planned and built for the use of counsellors are constructed of concrete blocks, have no windows, and are about the same size as a cell in the local jail. The monks of medieval times had better accommodation. The counsellors spend their whole working day talking to students or parents in these rooms and, of course, are very happy with the fact that the plans were found to be quite adequate by teachers-come-administrators.

Let us take such a little thing as the type of flooring which could be used in schools. Local boards have fought against a break from the old-fashioned hard floor. 'They have to be cleaned,' they say. Some years ago I suggested wall-to-wall carpet for the social studies room and both teachers and administrators laughed at me. I notice that people suggesting the same thing in the U.S.A. are calling it 'acoustic flooring.' It is wall-to-wall carpet and some Canadian schools are getting it.

If we had up-to-date administrators who were able to keep in touch with the changing times and who did not have to convince some trustees or some equally conservative teacher-administrators of the value of some new materials for the school plant, we might be able to get away from the school which is a jail to both the student and the teacher.

While I am at it I should mention another bright plan which a few of our administrators are suggesting—no windows in the classroom. They fear that the students might waste time looking out the windows in the classrooms, and that they will have to buy blackout material for the film periods.

The people of Alberta and British Columbia brag about having the best scenery in the world. I guess it is too good for the kids. I guess they have to keep it for visiting Americans to buy. Thank God I had a chance to look out of a window when I went to school. I got some pret fair lessons in sex education from gophers playing in the field by the little Caron Prairie school I attended. I was able to do a little thinking and a little dreaming too. What sort of daydreams can a fellow dig up staring at a concrete block wall? Ugh!

The second question has to do with the instruction, and who is to be responsible for the teachers and their work.

It is obvious that if the finance and management of the schools should be on a provincial basis, teachers would anticipate that they would become civil servants. The official stand taken by teachers' organizations has been opposition to this. I think teachers will find that they can in a sense become civil servants and still be able to handle their own affairs.

It is clear that the only one suitable to be in charge of a classroom is a qualified teacher. It is also clear that the only ones who are able to judge what is taught and how it is taught are the same people.

Another point about which we should be clear is the fact that a teacher in a classroom must have complete charge. The outdated system of inspection by people who just happened to become principals or superintendents has been the cause of many people leaving the teaching profession before they found out how much they could have contributed to it.

I remember the pleasant, smart little new teacher who seemed to be having trouble. She was subjected to the usual series of very clever men coming into her room, sitting at the back in the same way these little people have done for years, and of course ruining any chance the girl had of getting control of her class. I liked what she told me. 'If those stupid people would leave me alone for a week or two, the kids and I would get along well.' She quit teaching and I am sure we lost a good teacher.

Every teacher has his own way of teaching and it changes with each child. Who is to determine, other than the child or the instructor himself, the success of the learning situation? Train teachers in the basic things and then, for heaven's sake, let them do their job. I should hate to have a surgeon operate on me with an inspector looking over his shoulder; surely there is no need to continue something so out of date.

Perhaps if we did away with the inspection method, we should make things very frustrating for the type of principal who brags about how he keeps his teachers in line. Some years ago I met such a principal. He had

Continued on page 209

C. D. OVANS

# teachers are important

TEACHERS HAVE BEEN TOLD time and time again that they are important, only to find each fall that there is a great reluctance to recognize that importance in salaries.

Yes, teachers are important, say our public figures and politicians—but not so important that the school system shall never treat them as slaves (coffee breaks and free time for lunch are not usually for them) nor so important that they shall never be assigned unmanageable tasks or provided with inadequate resources.

What makes teachers important? I ask the question seriously. If there is any truth to the findings of the Economic Council of Canada about the need to invest in education as an investment in the nation, the question is an important one.

Teachers are important because they take groups of children into their care each year and guide their growth and development. Teachers, alone in society, are entrusted with this awesome responsibility. Of course, teachers are important only as they discharge this responsibility faithfully and well.

Those who are teaching very young children are most important of all, because ages 4-8 are the critical years for the children's mental development. Children's learning styles, their learning set, their readiness to seek and accept experiences that will lead to learning are said to be established in these years. It is very important that the child develop a positive self-image in these years.

If schooling is so important in the early years, why is it that, until very recently at least, most of our re-

sources have gone into the secondary schools? Why is it that we have provided in B.C. a five-year university program for secondary school teaching, but are content to permit people to begin teaching in the elementary schools after only two years of university?

The reason is that the school system has been concerned with subjects, not children. Subjects are harder at the secondary level; therefore the teachers of those harder subjects need to be better educated.

But this is changing—fortunately for the children. We are beginning to look upon the teacher as a facilitator of learning rather than as an imparter of factual information. We are realizing that it is learning that really matters, that teaching is important only as it contributes to learning.

A Chinese proverb says:

'To hear is to forget.
To see is to remember.
To do is to understand.'

The teacher who stands at the front of the room and tells children what to memorize or how to behave belongs to yesterday. Today's teacher contrives to have exciting things for children to do, through which they will ask questions, pose hypotheses and try out possible solutions, to the end that problems will be solved through understanding.

The teacher of yesterday was important, but not nearly so important as the teacher of today.

Subjects, of course, have a place in the school curriculum, but only as tools, not as ends in themselves. Mathematics, used as a tool, becomes a way of seeing relationships. Science becomes a way of discovering knowledge. Social studies helps children understand and deal with the social environment. Art can be used to help children see more perceptively and communicate what they see as good and beautiful to others. Music helps them organize sound into harmony and rhythm for pleasure—their own and others'.

It follows that teachers are important only as they effectively use subjects as tools. The teacher who knows a subject well is, of course, more likely to use it well. If children come to hate or fear a subject, the teacher will not have helped them; he will have failed them.

The other tool—the most important tool—the teacher uses in guiding the development of children is himself. Learning is a highly personal matter. It is said that you really can't teach another person anything; you can merely make it possible for him to learn—by exhorting, persuading, encouraging, supporting, enticing—all the human things which teachers do.

The secret of establishing these kinds of personal relationships has been put very simply by the psychiatrist, Dr. Carl Rogers. 'It is,' he says, 'a matter of being a warm person yourself, then accepting, trusting and prizing others.'

Now let us look at the important functions of teachers.

One writer has suggested that schooling is made up of training plus education. Training depends on instruction. Through instruction children acquire information and skills. The most important of these skills are the communication skills, mastering symbolization, learning the language skills. The process involved is conditioning. The same process applies to the training of both children and animals.

Teachers become very skillful at instruction, and it is important that teachers instruct well. But much of instruction, much of training, can be taken over by machines.

Education, by contrast, is what children do with the information and skills they have acquired through training. This is a higher level of learning. It depends upon the development in the nervous system of what a Russian psychologist has called a 'second signaling system'—the capacity to deal in abstractions, so that the organism is not dependent, as animals are, entirely on their senses. We cannot 'educate' animals.

Educating is developing in children this second signaling system, that which makes them Man, not animal. It follows that the teacher as educator is more important than the teacher as instructor.

We must admit that we have a great deal to learn about education. There need be no shame in this kind of admission. Only in recent years has there been available a significant body of knowledge about what education as a process is.

### Man's Intellect Will Be Strengthened

There have been volumes and volumes written about learning as conditioning—the kind of knowledge that supports conditioning—but knowledge to support our efforts as educators is still being organized. And while theory is emerging, no one has made a really significant break-through in translating theory into teaching strategy.

The hope that is in Man is not in what he is, but what he may become. What he will become depends on education.

Buckminster Fuller uses the word combination 'energy-invention-intellect' to express Man's hope. By means of his inventions Man has used energy to do more with less. His inventions in turn depend upon his intellect. Fuller predicts that, just as a few years ago Man learned to split the atom, thereby releasing so much energy that our productive capacity can satisfy the basic material needs of all people in the world, Man will in the future learn to split the atom of the mind. His intellect will be strengthened to the point that social and political, as well as technological, problems will be solved.

Teachers, as educators, will then be much more important to society.

We can take hope from the thought that, as Man, teachers are, like the children they guide, capable of growing and developing. We need only accept the humanity that is in us, our weaknesses along with our strengths, and continue to do the very best we can, to stand up for what we believe best for children, and to be willing to learn ourselves.

If we do all these things, we shall, as the Parent Royal Commission Report said about Quebec teachers, rise more than nobly to the expectations held for us by the school system; indeed, to the much higher expectations we hold for ourselves.

If we do all these things, we shall then be able to say emphatically, 'Teachers ARE important!' □

G. W. SHEPHERD

# LET'S ADMIT OUR MISTAKE

I'M TIRED OF INTERVIEWING students who consider themselves second class citizens.

There has to be something wrong with a curriculum organization that forces students to resist at all costs the 'occie' programs, the programs for the 'dumb' kids, the 'mickey mouse' programs, the programs that 'close the doors.'

There has to be something wrong with a curriculum organization that brings comments from Canada Manpower that any student who hopes to find placement in a worth-while position better take the 'Academic' program.

There has to be something wrong with a curriculum organization that permits so-called Academic students to graduate with 10 courses but requires so-called Vocational students to complete 12.

There has to be something wrong with a curriculum organization that forces students and parents to choose 'qualifying' courses which predetermine a course of action which has serious consequences for those who guess wrongly.

There has to be something wrong with a curriculum organization that forces students to choose a course of action at an age when they are not ready to choose.

There has to be something wrong. There *is* something wrong, and we had better do something about it before it is too late.

Two years ago our General Secretary attempted to have us reconsider what had been done in curriculum re-organization. He suggested we consider the concept of general education for everyone up to Grade 12. Perhaps his timing was wrong and his ideas too general, but I believe his basic premise was correct. All we did at the time was not listen, ignore him, and attack him. This is not a defense of our General Secretary, he doesn't have to be defended. This is an appeal to those who are disturbed by what we have done. This is a request for action. It is time for a second look.

### Reasons for a New Curriculum Organization

1. To permit a greater degree of flexibility in course selection at the senior secondary level.
2. To eliminate the demoralizing effects of the present streaming.
3. To create a truly exploratory three years in Grades 8, 9, and 10.
4. To emphasize the need for individualized counselling so that students and parents are given every

*The writer is on the staff of Centennial Jr. Secondary School, Coquitlam.*

opportunity to understand and appreciate the role of the school in the education of the young adult.
5. To free the senior secondary school from the controlling influence of post-secondary school training institutions of all types.

### Suggested Changes in the Present Curriculum Organization

1. Issue one senior secondary school certificate for everyone. The present method of using the transcript for Academic students and something else for all others makes very little sense. A properly designed certificate for everyone, issued by the senior secondary school, would be more to the point.

2. Eliminate forced choices at the senior level. Courses that do not count for graduation should not have to be taken. At present students select courses to fill up spaces on the timetable to satisfy external regulations, which are based on a shaky premise. No other post-secondary school institution forces choices which are not counted in some way toward a certificate, diploma or degree. The problem is accentuated in smaller schools.

3. Eliminate the qualifying concept in the junior secondary school through the development of more resource courses and the introduction of either beginning courses or the level system in the senior school.

4. Recognize that forcing a choice of qualifying courses in Grades 8, 9 and 10 is putting the cart before the horse. Students are not ready for such choices and unnecessary pressure is placed on student and parent to select a program which, under the present system of streaming, could easily have serious implications for later years.

5. Accept the concept that Grades 8, 9 and 10 should be truly exploratory; organize the timetable and develop resource courses to permit such exploration.

6. Develop one program at the senior level but permit a greater degree of free choice on the part of the student. Research is required to determine the optimum course loading, but most students should be capable of completing 12 courses in two years. Some students may take three years, while others may wish to complete 13 or 14 courses in two years.

7. Accept the concept that extrinsic motivation has a role to play in graduation, and require a minimum of 12 courses successfully completed before a graduation certificate will be granted.

8. Introduce the concept of Course Area selection based on a level system where this is required. A good example of this concept would be the introduction of three levels in Mathematics 11:

Level 1 — For students planning to take Ma 12.
Level 2 — For students who do not want further courses at the senior level but who may decide to take Ma 112 at a later date.
Level 3 — For students who desire a useful and practical course in mathematics and who in Grade 12 or later wish to proceed to Level 2, etc.

In many cases the concept of Course Area selection would not require levels but would permit the student a wider choice within a given field.

In the social studies area, for example, there is little reason why a student should be forced to take a particular course at the senior level. Permit the selection of this course from any of the social studies courses available in the school—Social Studies 11, Geography 12, History 12, Economics 11, Law 11, General Business 11 (a poor name for this course).

PROPOSED RE-ORGANIZATION CHART
Grades 11 and 12

| | |
|---|---|
| General Education Constants<br><br>(Total of 6 courses for everyone) | English — 2 years<br>*Social Studies Area — 1 year<br>*Mathematics Area — 1 year<br>*Science Area — 1 year<br>OR<br>*Language Area — 1 year<br>Physical Education — 1 year |

*NOTE — Courses may be taken in either grade but students should be made aware of any prerequisites that become necessary—e.g., Ma 12 requires Ma 11 (Level 1).

Select any six courses from the groups below to complete the requirements for the Senior Secondary Graduation Certificate.
(NOTE — At least *three* of the courses must be numbered 12.)
Group 1 — Typing 11; Bookkeeping 11, 12; Accounting 12; Office Practice 12; Office Orientation 12; Shorthand 11A, 11B; Secretarial Practice 12; Business Machines 12; General Business 12.
Group 2 — Drafting 11, 12; Industrial Power 11; Construction 11, 12A and 12B; Mechanics 11, 12A and 12B; Electricity 11, 12; Electronics 12.
Group 3 — Mathematics 11 (Level 1 or Level 2 or Level 3); Mathematics 12.
Group 4 — Foods 11, 12A, 12B; Textiles 11, 12A, 12B; Child Care 12.
Group 5 — Art 11, 12; Applied Design 11, 12; Commercial Graphic Design 11, 12; Drawing and Painting 11, 12.
Group 6 — Band 11, 12; Chorus 11, 12; Acting 11, 12.
Group 7 — Foreign Language 11, 12.
Group 8 — Biology 11, 12; Chemistry 11, 12; Physics 11, 12; Industrial Science 12; Physical Science 11.
Group 9 — English Literature 12; History 12; Geography 12; Law 11; Economics 11; Social Studies 11; General Business 11.
Group 10 — Community Recreation 12.

This time we should try to build a curriculum organization which truly recognizes the worth of each course; the worth of each student; the worth of each teacher. There is no need for labels.

We made a mistake. Now is the time to re-organize the re-organization. □

**At the remedial reading center Mrs. C. M. Webster types a boy's story for him to read later into a tape recorder. Hearing his own voice read his own words encourages a child with reading difficulties to make greater efforts.**

FOR MANY PUPILS success in silent reading is attributable in part to previous success in oral reading. On the other hand, many pupils in the intermediate and upper grades have difficulty with their silent reading assignments because of their failure to have mastered some of the basic oral reading skills.

As a general rule, except for diagnosis or, possibly, for testing, it is preferable that pupils be required to read aloud only after they have had an opportunity thoroughly to prepare the passage or passages they are to read. This is especially true for weak oral readers. Poor oral reading, before classmates especially, can be a frustrating experience; successful oral reading, on the other hand, can be a rewarding and encouraging experience.

Not all pupils can become skilled oral readers. But many pupils whose silent reading is weak—pupils who are of average or better than average intelligence, and some even of high intelligence—can improve their silent reading if time can be found to help them overcome some of the basic oral reading difficulties that they are still experiencing.

The procedure outlined below has been used with a high degree of success with pupils whose oral reading difficulty is partly caused by their inability to analyze and pronounce words. The procedure has been used with equal success from the Grade 3 level up to the Grade 10-12 level, and even with adults. It has been used not only with individuals but also in modified form with groups and with classes. It is predicated on the concept that very frequently, in pupils whose teacher has provided them with opportunities to experience success, the desire and will to learn will begin to grow.

As presented the procedure pre-supposes a fairly severe degree of difficulty on the part of the pupil and time for the teacher to give individual help.

1. The passage to be read is selected. If the pupil can

J. H. SUTHERLAND

The second of two articles by the co-ordinator of Vancouver's remedial reading services.

# Oral Reading Isn't Easy

be encouraged to help make the choice, so much the better, particularly if it contains some words that he knows when he hears them but that he is not likely to recognize in print.

2. The pupil is asked to read the passage through to himself and to place a light pencil dot beside all words that he is unsure of.

3. Each marked word is then dealt with individually. (The teacher may find it necessary at this stage to take time to develop or review the vowel, consonant, syllable concept.) The pupil breaks each word into syllables, with the help of the teacher if necessary. He pronounces each syllable carefully in turn as many times as he may require to enable him to become aware of the syllable sound pattern. He must finally pronounce the word as in accepted speech. He may be able to do this for himself or the teacher may have to pronounce it for him first (i.e., col o nel = kėr nel).

4. The pupil must then write the word from recall (never by copying it), saying the *syllables* (never the letters) as he writes them and finishing by pronouncing the word correctly.

Extreme patience on the part of both teacher and pupil is essential at this stage. If the pupil writes the word incorrectly, he is required to compare what he has written with the correct form. The teacher points out the syllables he has written correctly before explaining where he has gone wrong. It is important that the teacher point out first to the pupil the parts of the word he has right before discussing the mistakes. He must begin to feel that he is making some progress. (For example, to the pupil who wrote 'prsin' for 'person' the teacher, before proceeding, indicated that he had four parts out of six correct.) The procedure is repeated until the word is written correctly. It is the correct writing of the word from recall that helps fix it in his mind.

5. When all the indicated words have been treated in

this way, the teacher points to each in turn in the printed passage and asks the pupil to pronounce it once again so that recognition may be further reinforced.

6. The pupil then re-reads the passage to himself. He must feel free to ask for help if he is still in doubt.

7. He next is asked to read the passage aloud. He is not stopped if or when he makes mistakes as it is preferable to maintain the thought continuity. Instead the teacher writes down each miscalled word, if there are any. The teacher's spelling of the word should approximate the pupil's mispronunciation (i.e., immeejit = immediate said instead of meditate).

8. When he finishes the passage, each miscalled word is compared with the correct form. The teacher points out what the pupil has said and applies the procedure employed in Step 4 to each in turn.

9. Once again the pupil is required to read the passage through to himself and again he must feel free to ask for further help.

10. Finally he re-reads the passage aloud, again without interruption. Almost always he does so with much more success than he has ever experienced before. The result usually gives much satisfaction to both teacher and pupil. At this stage, if he makes only one or two mistakes, it is preferable to disregard them so that the feeling of success is not destroyed.

11. If a tape recorder is available, the pupil then reads the passage into the tape. Sometimes, at first, because of nervousness, two or three tapings may be necessary. It is here that any mistakes in Step 10 are explained. Almost all pupils respond exceptionally well when they finally hear their own voices presenting a successful effort.

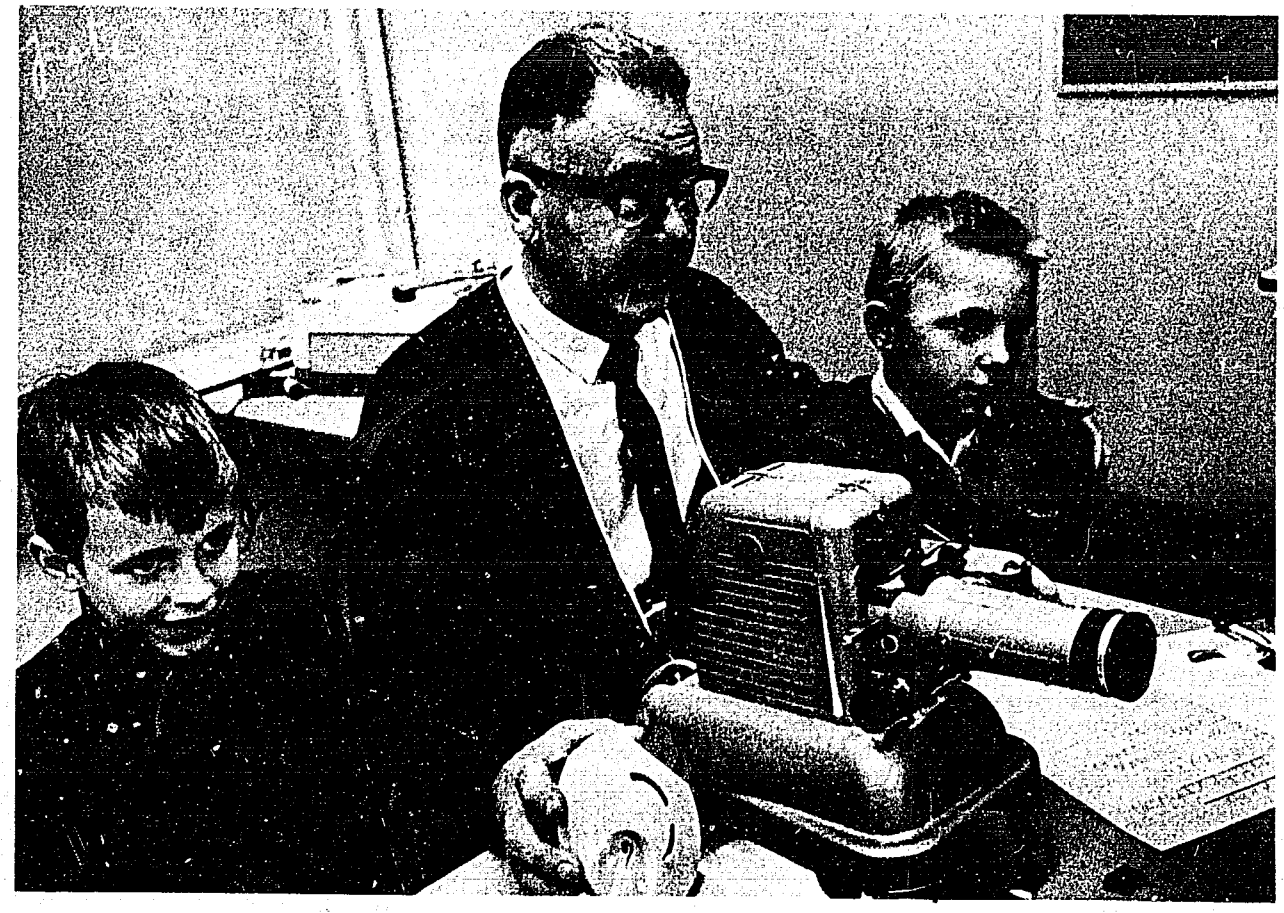
After pupils have become accustomed to this procedure, they can be shown how to use the dictionary to help them prepare a passage on their own. The teacher becomes involved only when the pupils feel they are prepared to read the passage aloud or have prepared a taping for the teacher to hear.

Once the pupils have understood the procedure, the teacher can have pupils work in pairs to help each other. Sometimes a good reader can be assigned to help a weaker pupil, with benefit to both.

Gradually, of course, exercises involving comprehension must be introduced as the oral reading improves. And finally, the transition to silent reading must be carefully planned.

I am still involved with teaching weak readers and am fully aware of the difficulties the classroom teacher would have in introducing under present conditions a procedure of the type outlined to a group or to a class. It has, however, been done successfully often. But until the school system does make provision for those pupils who need this type of help, many pupils, some of them highly capable, will continue to have difficulty with reading and, consequently, with those subjects involving reading. □

**The remediation of reading difficulties involves the use of special equipment. Mr. Sutherland uses a projector which shows a word or a phrase at a time to help his pupils perceive words accurately.**



Project Discovery has provided resources for more effective instruction. Because children can use the materials themselves, teachers, relieved of the necessity to work constantly with large groups, can spend more time with each one.

# PROJECT DISCOVERY

# A UNIQUE EXPERIMENT

HOW DO STUDENTS and teachers react when films and projectors are as commonplace in the classroom as books and a blackboard?

'Project Discovery' is that kind of unique educational experiment.

After nearly four years of intensive exposure in four school systems in the United States, the program has demonstrated that every-day classroom use of audio-visual materials will:

1. enable teachers to capitalize on the 'teachable moment' when a student suddenly grasps a new idea;
2. help teachers to communicate complex ideas more effectively, and to teach new subject matter;
3. give students new vistas of understanding and comprehension;
4. spur slow learners to move ahead more quickly.

In some instances, the benefit has been that of the 'magic lantern'—giving children their first look at the ocean or the wonders of the insect world, or of seeing familiar stories come alive on the screen with the characters in new, meaningful dimension.

Project Discovery was created in 1964 as a joint venture by Bell and Howell and Encyclopaedia Britannica. Research sites representing 220 teachers and

*This article was prepared by Bell and Howell Company and distributed by* Precis, *an editorial service.*

**The teachable moment! Through Project Discovery, a teacher can immediately follow-up on a live in-class experiment with an appropriate film on the same or a related subject.**

5,325 pupils were established at the Mercer Elementary School, Shaker Heights, Ohio; Thomas Edison Elementary School, Daly City, California; Scott Montgomery Elementary School, Washington, D.C.; and Terrell School District, Terrell, Texas.

Bell and Howell supplied every classroom and every school library with an automatic-threading 16mm motion picture projector and a cartridge-loading 35mm filmstrip projector. Encyclopaedia Britannica stocked the schools with films and filmstrips. In some cases a special film library room was set up, apart from the traditional book library; in another school films and filmstrips were ranged alongside books on the same shelves, according to the subject matter.

The films and filmstrips are available to teachers every day, and at any time during the day, like any book on the library shelf. Students can also check out films and projectors to take home, or to use during study periods, for learning on their own.

The reaction to Project Discovery from both educators and researchers has been impressive.

In Terrell, Superintendent Grady Hester said, 'Library circulation of books has gone sky-high as the result of the new interest by students in the subject matter.'

Hester also observed, 'It is our firm belief that the measurable benefits of Project Discovery within the next few years will be such that every institution of learning will feel that audio-visual programs are necessary to the grasping and retention of knowledge, necessary to keep pace with the times.

Miss Billie Stoffee, a teacher at Mercer Elementary

School, said, 'Audio-visuals spark the imagination. When this imagination is stimulated, ideas begin to flow. With these aids, learning can be dynamic—with the student setting his own goals and traveling at his own rate of speed.'

Operating under a special grant provided by the U.S. Office of Education, educational researchers at Ohio State University have carefully evaluated Project Discovery over the past few years.

A particularly significant finding was that 62% of the teachers reported they now were able to teach subject matter which they could not have taught before because materials had been unavailable. Project Discovery had eliminated such familiar problems as securing a projector that had to be shared by many, difficulty in operating an outmoded projector, and difficulty in obtaining a film at a time for its best use in the classroom.

Other findings were:

1. Ninety-two percent of the teachers said films and filmstrips increased the general subject matter information of the students.
2. Nearly all teachers agreed that students improved their vocabularies and showed less classroom fatigue.
3. For slow learners, A-V materials proved more effective than reading materials.

Principals of other Project Discovery sites have offered these comments:

John Belforte, Thomas Edison School: 'Project Discovery has extended the potentiality of teaching. The multi-media library provides an additional dimension to learning . . . from the individualization of instruction to the in-service training of teachers. Films and filmstrips provide a common experience for children, while simultaneously presenting several concepts. The opportunity for verbal discussion naturally excites children to immerse themselves in the act of learning. This is reflected in their desire to read about and pictorialize events and situations which will ultimately provide the basis for written expression.

'Therefore, teachers are allowed the opportunity of extending the teaching act. They can guide children to learn inductively to understand the process involved in arriving at the alternative solution to common problems.'

Alice Van Deusen, Mercer Elementary School: 'Project Discovery has meant less telling by the teacher and more doing by the student. Learning has taken on greater depth, with more involvement by the students—and with greater individualization of instruction. A key factor in the success of the program has been the ease and assurance of our students in operating the projectors. Even our kindergarten children have learned to use the projectors.'

John D. Howard, Scott Montgomery School: 'Education stands at the crossroads. We teachers, in our quest for educational excellence, are expected to create an environment in which our children can be active learners; we must provide quality education for every individual within an ever-expanding and changing edu-

cational system. Like the superior surfer, we must ride the wave just in front of the crest.

'Project Discovery here at Scott Montgomery has been the fulcrum for active learning. We have attempted to be creative, innovative and to anticipate the needs of our children in light of rapidly changing educational rationale. Project Discovery has provided the resources for more effective instruction and the opportuntity for the imaginative teacher to reach each child.'

Another evaluation of the role of Project Discovery has come from Nathaniel R. Dixon, former principal of the Scott Montgomery School, now serving as director of audio-visual services at the Smithsonian Institution:

'Project Discovery has brought the world—past and present—into the classrooms of Scott Montgomery School.

'Under the skillful guidance of their teachers, our boys and girls are transported daily into other communities, to distant lands, to the outer limits of space, into the world beneath the sea, into eras long past, to farms, factories, even into the cocoon of the butterfly.

'Teachers may now capitalize on the sensory impact of motion, sound and color to stimulate and motivate reluctant learners, increase the pace of slower learners and broaden the horizons of more able pupils. School has become more exciting to boys and girls and their teachers.

'We have every confidence that used as a tool for direct teaching and learning rather than a supplementary aid, Project Discovery has greatly enhanced the potential of our teachers and our pupils to learn.'□

## School District No. 43
## COQUITLAM

### Teachers for September, 1968:

250 positions—Kindergarten through Grade 13 representing all subject areas including administrative positions.

*Applications and/or interviews through the following channels:*

1. School Board Office
   550 Poirier Street, (Coquitlam)
   New Westminster, B. C.
2. Student Services Building — University of Victoria
   Monday, March 18 — 9:00 a.m. to 5:30 p.m.
3. Personnel Office — University of British Columbia
   Tuesday, Wednesday, Thursday, Friday, March 19, 20, 21, 22 — 9:00 a.m. to 5:00 p.m.
4. Bayshore Inn — Tuesday and Wednesday, April 16 and 17 — 9:00 a.m. to 5:30 p.m.
5. B.C.T.F. Annual General Meeting — Penticton
   Tuesday and Wednesday, April 16 and 17
   9:00 a.m. to 5:30 p.m.
   Interested teachers contact B.C.T.F. registration desk.

Interviews will be conducted by one of the following District personnel: Mr. G. H. NELSON, *District Superintendent of Schools;* Messrs. R. W. NESBITT, A. K. MUTTER, W. C. BRAND, *Directors of Instruction.*

## *Our School System is Obsolete*

Continued from page 197

a very simple method. When he did not like a teacher he inspected him until his classes were ruined. The teacher would usually blow up and that would be grounds for asking for his transfer. Simple and workable.

I suppose we cannot get away from the chain of command in education any more than we can in business or military organizations. Therefore, I propose that there should be chairmen of subject groups who would *not* receive additional pay, but who would have additional time to co-ordinate the work of the group without interfering with the individual's efforts. Each would be elected to the position by his fellow teachers.

I suppose we should still have to have a principal for each school who would have overall charge of instruction. There would be no need for vice-principals, for they would be replaced by administrators who were trained for the job. Who would select these principals and set their terms of reference? This would be done by the chief administrator, together with the instructor chief in the district, and at the provincial level.

We see, then, that there would be an administrator chain of command from the school up to the provincial level, and also an instructor chain from the teacher to the provincial level.

Space does not permit me to detail such a plan. I hope I have indicated that to keep up with the changing times we must drastically alter our administrative systems, our taxation procedure and our control of instruction, and we must train people who are not teachers to be managers of the educational plants.

Many people are concerned about the fact that we have so many different courses of study in Canada. A child moving from one province to another has difficulty in adjusting to the new and different academic situation.

I do not think we are ready yet to accept a common curriculum for the whole country. However, this should not stop us from trying to do something about the major core material in the subject fields.

Perhaps if we had a permanent committee made up of one representative from the federal government and one from each of the provinces who could discuss and suggest ways by which the provincial curriculum groups could move toward a basic core guide in each subject, the problem could be solved eventually.

The children of Department of National Defence personnel in Europe have used Ontario courses regardless of the province from which the students or teachers came. It has worked. It follows, then, that it should be possible to have a few educational guide marks to follow and to which teachers can refer when planning their courses.

Think these suggestions over. Perhaps we have time to catch up to other fields if we think young. □

## *Drugs-the Emerging Genie*

Continued from page 193

for 'learning theory' in psychology texts is irrelevant and probably incorrect. Learning appears to involve a number of enormously complex processes, acquisition of information, processing of information, establishment of memory, maintenance of memory, retrieval of information, etc. Memory itself appears to be a discrete set of processes, with short-term memory quite distinct from long-term. (Short-term memory may be purely electrical-neurological, while long-term clearly involves biochemical processes.)

This new view suggests, for example, that mental retardation is not a single phenomenon. It may be more constructive to try to treat it in terms of defects in specific and perhaps quite discrete functions, e.g., acquisitions of information, formation of memory, retention of memory.

The recent discoveries have also made the traditional 'nature vs nurture' argument obsolete. The issue is not heredity vs environment, but rather the inordinately complex process of interaction between nature and nurture that must be understood if we are to understand learning, or indeed all of human development. The problem physical anthropologists are now struggling to answer, Professor Hyden suggested, is: Do we think because we have a brain, or do we have a brain because we think?

Certainly the interaction process is far more complex—and more dimly understood—than had been thought. It seems clear that one cannot understand how any organism responds to an environmental input without some understanding of its particular genetic makeup. Some behaviors are clearly programmed into the brain; thus a baby at birth has a repertoire of behaviors such as drinking, swallowing, crying. At the moment, moreover, learned behavior does not seem to differ from innate behavior, suggesting to some (but not all) of the seminar members that the chemical processes must be the same for both. Certain aspects of post-natal development, moreover, are programmed to unfold in predetermined sequences which, within certain perhaps broad limitations, may not be subject to change.

At least some of the preprogrammed stages of development, of course, seem to require appropriate stimuli from the environment, but the nature of the relationship remains obscure. A number of seminar members believed that the absence of such experiences may cause 'disuse atrophy' of particular parts of the brain, which may be irreversible. But what kinds of experiences are needed, in what quantities, and at what period of time?

These questions cannot yet be answered with any confidence. But answered they will be; on this point, the seminar members agreed, however much they may have disagreed as to where the answers might lie or what they might be. Biochemists and molecular psychologists are turning up increasing evidence that a factor does exist which will allow learning to be transferred and memory increased through drugs. The research in this field is rapidly increasing in sophistication, and a breakthrough could come at any time. □

A MATTER OF OPINION

# ALL ELEMENTARY PUPILS SHOULD GO TO SCHOOL FOR THE SAME LENGTH OF TIME

G. O. SHANTZ

MR. MARTIN'S ARTICLE 'Continuous Progress Does Work!' (December 1967 issue) points out two myths which must be eliminated—grade system and textbooks tied to a certain grade or year. I certainly agree here. However, in my opinion, Mr. Martin negates the concept of continuous progress when he states that 20 to 30% of his pupils will require four years to complete the primary program and that there will be a percentage who will remain in the elementary school one or two years beyond the normal time (normal time—seven years 1-7 or eight years K-7).

If this is so, there is something wrong with our philosophy. Surely our intent is not to try to fit the child into a program. The program should be tailored to fit the child. Surely our intent is not to have a program which will require 20 to 30% of the pupils to remain in the elementary school one or more years beyond the normal number. The program should be such that all children proceed through the elementary school in the same number of years.

Perhaps this may appear to be radical thinking. But over the years I have felt that little value has been gained for a child to remain in the elementary school more than seven years, or eight years if kindergarten is included. I have had children repeat; I have had children take four years to do the primary program; I have had beginners withdrawn for a year because of immaturity. I now believe that these situations were not in the best interests of the children involved.

Last year, 1966-67, 28% of my Grade 7s were retarded one or more years. Most had had the additional year or years in former schools, although I had been responsible for two or three repeating. There were 16 in all and they were not strong academically. But emotionally, socially, psychologically and physically they were not elementary pupils. They were teenagers with all the attendant characteristics and they belonged with their peer group. They were, in short, secondary students.

I realized also that we did them a disservice because we endeavored to fill their needs with fewer resources than those in the secondary school. The boys made some cupboards for the kindergarten class. The cupboards, while serviceable and well painted, are not exactly square. This is not important. What is important is the fact that these boys were cutting lumber on chairs, using wrong methods and inadequate tools. In the secondary school they would have qualified instructors giving proper instruction and using proper tools.

The secondary school has home economics, industrial education, counsellors and specialists. The school is designed for teenagers and can better cope with their needs. The elementary school is primarily for pre-teenagers.

The fear that pupils may go through the elementary school sitting on their backsides and doing little is groundless. Teachers are professional people and as such they do all in their power to help all children endeavor to reach their potential. Given freedom to plan, they will identify the needs of the pupils and use, insofar as possible, the limited resources of the school to fill these needs.

There will be mistakes, of course. How can we judge techniques, methods, procedures if we don't experiment? Experimenting involves certain risks, but teachers are generally cautious (perhaps too much so) and they will consider what the results are likely to be before proceeding. A successful experiment is rewarding—an unsuccessful one can be terminated quickly. Only in this way can we assure ourselves that available resources, whether human or otherwise, will be used in different ways to satisfy the needs of pupils.

If our aim is to develop pupils in such a way that they have respect and consideration for others; that they have a sense of accomplishment, a feeling of security, a love of learning, we must have a program in which the child is first, the curriculum second. Children react, perform and fraternize more positively with their peer groups. Thus children should progress through the school in the same length of time. □

*Mr. Shantz is principal of Sir Frederick Banting Elementary School, Coquitlam.*

## *We Shall Miss Them*

| Active Teachers | Last Taught In | Died |
|---|---|---|
| Nil | | |
| **Retired Teachers** | **Last Taught In** | **Died** |
| Miss Mabel Bower | Vancouver | December 27 |
| Miss Hazel Marie Smith | Vancouver | December 11 |
| John O. Welch | Victoria | December 27 |



# SERENDIPITY DEPARTMENT

THE OTHER DAY I was looking through my notebooks for a quotation or two I needed for a quiz I was preparing for some unsuspecting Grade 12 types. I didn't find what I wanted, but in the process of flipping over pages, I did find some that might be of some interest here.

For those moments when we feel 'what's the use of anything?', try this one on:

'To seek, to discover, and eventually to accept whatever the student is and knows simply for whatever he is and knows, and to work from that point as a teacher, is a precarious and noble business requiring the sensitivity, skill, practice and adaptability of the most eminent surgeon. At its very best, it requires a magnificent performer, in and out of the classroom, playing an infinite variety of roles.'

On another day in the staffroom mention was made of some attitudes and standards accepted, when not actually advocated, by the more vocal of the odd-ball minority in the school. One of the teachers present felt that we should let these characters know how we feel about some of their squalid standards in dress, deportment and attitudes. 'At least', he said, 'we should give them the experience of having someone walk out on them in a huff.' Or as somebody else said in another quotation I found:

'The rebel today feels he has the right to dictate to everyone else what the rules will be and what their response to him must be. Never does he feel that others have any right to require *him* to accept *them* on their terms.'

In the columns of Richard Needham there is often to be found an unexpected bit of joy, like this one:

'They are all technicians whom the West produces, those who come to its schools from Asia and Africa, and those whom it induces, through its image and example, to arise in their own lands. A world of perfect technicians is the aim, not a world of human beings, let alone of beings divine. A dreary and boring world, where there is nothing beyond man and his mastery over nature, including the mastery over other technicians through his scientific management of them. Perfect hierarchy, perfect organization, total efficiency; but no spirit, no freedom, no joy, no humor and thus no man.'

Needham's basic idea is echoed by Edith Hamilton, 'College education today tends to be an elementary system of teaching technical skills useful to a producer-consumer society. Goods and comfort are not the measure of education. The purpose of education is to make life spiritually and intellectually worthwhile for everyone.'

I long ago stopped being surprised at the source of some of the most satisfying, provocative or giving - one - furiously - to - think items. They pop up anywhere, anytime. The thing to do is grab them and stick them in the notebook before they get away.

For instance, while you might justifiably expect Van Wyck Brooks to say something like, 'Regarding the creative writing courses in our colleges, one must add that they tend to destroy the audiences of literature. They do so by promoting into writers, and often opinionative writers, the susceptible but uncreative persons who might otherwise be the best readers,' or Cyril Connolly to say in part, '. . . the world to which we all shut our eyes is engulfing us too fast, and brings with it a complete negation of the aesthetic values of the past . . .,' you don't really expect to find quotable quotes in pop writing, specifically in whodunits or howcatchems.

I read a lot of whodunits for relaxation at bedtime, and I have found a number of entertaining bits in the conversation of the characters. In one, a psychiatrist said to an assistant, 'There is one thing I wish you to remember. In the present state of society, the patient is right, and you are wrong.'

Len Deighton gives this to one of his characters in a recent novel, 'To an innocent, anything in the world is possible, because there's no experience programmed into the memory to tell you that things aren't possible . . . Innocence is the knowledge that you can do something, and experience is the knowledge that you can't.'

Finally, here is one that comes into my mind in class when I feel I have been orating more volubly than usual. This from a character in a cloak-and-dagger opus, 'I talk too damn much. That's my trouble. I know it, but I can't help it. I talk when I should be listening. I say things that I shouldn't say even when I am talking.' □

# B.C. TEACHERS CREDIT UNION

Hours of Business

Tuesday - Thursday
9 a.m. - 5 p.m.

Friday
9 a.m. - 6 p.m.

Saturday
9 a.m. - 1 p.m.

1815 West 7th Avenue
Vancouver 9, B.C.
731-6191

Mailing Address
P.O. Box 4309
Postal Station "D",
Vancouver 9, B.C.

# NOTICE OF ANNUAL MEETING

## BUSINESS

Pursuant to Section 30 of the Credit Unions Act, 1961, the Twenty-Sixth Annual Meeting of the B. C. Teachers Credit Union will be held on Saturday, March 16, 1968, in the Auditorium B. C. Teachers Federation Building.

(1) Directors' Report.

(2) Credit Committee Report.

(3) Supervisory Committee Report.

(4) Treasurer's Report.

(5) Distribution of Profits. (In this connection the directors recommend that a 4½% dividend on share capital be paid to share-holders.)

(6) A special resolution reviewing the borrowing powers of the B. C. Teachers Credit Union.

(7) Election of Officers.

(8) Any New Business.

**E. Deagle,** President

**E. Simpson,** Treasurer

## Are We Really This Bad?

Vancouver 13, B.C.

Sir,

May I say how much I like the new paper, layout and covers of *The B.C. Teacher*. The covers particularly are imaginatively done and it is obvious that these students are really talented. You've chosen an excellent way to let teachers and others know about this talent.

*The B.C. Teacher* is an important magazine and compiling such a publication is probably a difficult task. However, I feel that the magazine has a terrific potential which is not being used—that of a vehicle through which those interested in education can voice their views in an emphatic but responsible way.

In response to this comment you will probably say, 'well, that is the case now.' But is it? I cannot recall one article over the past five years that has really pointed a finger at an educational situation in B.C. which should be changed, or at least investigated.

I realize that the magazine doesn't want names named and I can see that if such a precedent began there might be a difficulty in knowing where to 'draw the line.' However, I feel that people in any field of public service, whether they be teachers, professors, school board members, district superintendents, civil servants in the Department of Education, or Mr. Peterson himself, should not feel that they are, because of their position, beyond reproach. This appears to be very much the case and to me, *The B.C. Teacher* upholds this maxim of 'Don't rock the boat!'

In this regard I feel that only through collective public dissent can any constructive change be initiated. Surely *The B.C. Teacher* should present any progressive and new approaches to *any* aspect of education, for this magazine, along with the newsletter, reaches more educators than any other printed matter. The magazine should be used as a 'sounding board' if just to improve an educator's mental health!

Too frequently intolerable situations don't seem remediable just by talking over the problems with colleagues or by seeing an administrator. An association meeting doesn't help much either. An article concerning such a problem might be very beneficial.

Most articles in *The B.C. Teacher* are unimaginative and very dull. They present little else but the pablum that most of us have already heard monotonously during 12 school years as well as throughout any number of university years. There is a preponderance of articles that are far too philosophic and general in nature.

True, there is a place for this sort of writing, but not as much of it in an educational magazine. Surely this is the height of conservatism!

Progress and enlightenment of the public, the Department and Faculties of Education and of the teachers themselves is so painfully slow that only with emphatic, punchy writing can the pablum of mediocrity and the status quo be stirred.

As an example of dull writing one sees in the November 1967 issue, 'The Aims of Education.' The choice of that title is unfortunate enough but, as it turns out, there is also little else to redeem the article except a few choice sentences like, 'An aim . . . hardly mentioned . . . is the co-operation of school and home.' Also, 'It was interesting that some of the principals who were considered by inspectors to be most successful in practice were least able to formulate their aims clearly and convincingly.' The latter statement is probably all too evident to most teachers!

Sir Ronald Gould's article, 'Can teaching be a true profession?' is in the same category, but fortunately it was much more forcefully written and contained more evidence of personal views.

Two articles that really caught my interest were Vito Cianci's 'Fragments from a Script in Progress' and Wm. Kvaraceus's 'Deviancy. . . .' But, why wasn't the last one followed up by an article outlining a classic checklist study, carried out by a principal, which I think concerned student behavior and dress in a Vancouver high school? If the article, 'Deviancy. . . ,' is included in *The B.C. Teacher* to make a point let's really make it.

Selma Wassermann's ideas regarding strapping are not new. What could have been printed instead, or along with it, might have been something on a principal who was told to stop strapping almost entirely because his 'last resort' treatment, though considered by the staff to be fair, was giving the school a bad name, or more bluntly, was giving the school superintendent a bad time. Surreptitiously the teachers of the school heard about this because they found that students they'd sent to be strapped were just being talked to, then sent back to class with little or no change evident in connection with the problem.

In other words, I think the magazine could be greatly improved by including writing on more specific problems in education. For example, those found in B.C.'s schools and universities could be outlined, even without names being mentioned, as illustrations of situations which *The B.C. Teacher*, as one of several BCTF voices (which it *should* be) feels must be looked into by anyone who is concerned with educational improvement.

Some topics I'd like to see in the magazine are:

1. School as seen from a Social Worker's Viewpoint.
2. Why I Quit Teaching.
3. Learning to be an Industrial Education Teacher at BCIT.
4. Administrators — do we *really* need them?
5. Free Schools—what are they all about?
6. Dropouts from the Faculty of Education—their views.
7. How do school districts deal with the different child'?
   Those with emotional problems.
   Those who are 'gifted', 'slow learners'.
   Those who need remedial teaching.

Outlined would be programs in each district of B.C. If no program existed, this fact would be noted as a point of interest!

8. Teaching Blind and Deaf People at Jericho Hill School.

Finally, I also believe that there's a great need for articles reviewing educational research in B.C., in North America or elsewhere in the world.

MRS. JEAN HAWKSWORTH

P.S. - Don't you feel that a little more humor could be included in the magazine? Why not ask teachers for anecdotes? Notes from parents are very funny, too, like the one I saw this weekend: 'Gloria couldn't come to school as she was taking the rabbit to the doctor.' Exam answers are also a fund of humor: 'Joan of Arc was burned to a steak.'

## What Is a Good Profession?

Victoria, B.C.

Sir,

A statement of professionalism such as the one below might serve as an example in our current deliberations on the subject.

Note the lack of verbiage, clarity of thought and unembarrassed espousal of values, all of which seem to me to be highly desirable and worthy of emulation.

MRS. DORCAS BLAIR

A GOOD PROFESSION

guides its practices and policies by a sense of social responsibility.

will devote little of its energy to the building of its own 'in-group' strength and much to the serving of its social functions.

will not represent itself as able to render services outside its demonstrable competence.

has a code of ethics designed primarily to protect the client and only secondarily to protect the members of the profession.

will find its unique pattern of competence and focus its efforts on carrying out functions for which it is best equipped.

will engage in rational and co-operative relations with other professions having related or overlapping competencies and common purposes.

will be characterized by an adaptive balance among efforts devoted to research, to teaching, and to application.

will maintain good channels of communication among the 'discoverers,' the teachers, and the appliers of knowledge.

is free of non-functional entrance requirements.

is one in which preparatory training is validly related to the ultimate function of the members of the profession.

will guard against adopting any technique or theory as the final solution to its problems.

is one whose members are socially and financially accessible to the public.

is a free profession.

Quoted from a document entitled *Psychology and its Relations with Other Professions* (American Psychological Association, 1954) by Peter Knoblock, Ph.D., in *The Teacher of Brain-injured Children*, edited by William M. Cruickshank and published by Syracuse University Press in 1966. It would be, says Dr. Knoblock, applicable to many professional groups with only slight modifications.

*(Permission to reprint the above statement was granted by the American Psychological Association.)*

## Education Must Promote Social Planning

Vancouver 15, B.C.

Sir,

The topic, 'What Price Technology—Must We Lose Human Values?' by Gyan Nath, in the December issue, brings to mind some pertinent thoughts about the social adeptness of our educational media.

If teachers cannot explain our social dilemma, there is little likelihood that students, and indeed their parents, will understand the reasons either. The fact that young people out of school orient themselves, socially and religiously, into 'off-beat' sects, indicates they are in search of something their school has not been able to provide, and are in need of guidance and direction.

The educational process must start at once to cultivate new attitudes, new hope, and a positive sense of direction by revealing the role played by science in modern society. It must reject the textbook that glorifies war heroes, catalogs irrelevant dates, insults our Indians, rejects our French-Canadians, and ostracizes our Catholics. It must dispense with such petty academic nonsense, which does little more than perpetuate embittered ethnic and religious feelings, and offers nothing for the general progress of mankind.

Instead, it must promote the all-important science of social planning —briefly, the provision of a desirable purpose for everything we do, so oriented as to arouse the most fervent enthusiasm from each student—in all aspects of school life. Science already has made the ultimate gains of war unprofitable to everyone. None other than a maniac would consider waging a full-scale modern war! But the marvels of science still are sacrificed for the creation of massive profits by armament manufacturers —adversely affecting our whole social structure in the process. This alone should stimulate the need for common men to 'wake up' and, through dynamic social effort, cause science to serve with its bountiful benefits!

Herein lies the value of classroom discussion with students actively participating; to reveal, wherever possible, how science can serve man for his immediate good rather than for his eventual ruin.

Surely, the emendation of social energy itself is a science, which we in the West seem to lack; for man to realize the collective strength he holds, and how such strength may best be used to improve his lot! Such is the science being used today by the people of tiny Vietnam in their determined struggle against the will of colossal foreign powers. Such is the science of dialectical materialism, little known in the West, but ardently followed by the teeming millions of the East!

Students rightfully cannot grow to accept the responsibilities of this society, for this society is changing; and very rapidly too. Indeed, they must learn to identify those forces of progress and those of reaction; and they must know the significance of both in order to prepare adequately for the society which lies ahead.

With these concepts clearly understood, with the potentialities of science made fully available to the

people for their greatest social realization, a sense of hopelessness may become one of hope; an attitude of indifference, one of purpose (with respect); and the lackadaisical viewpoint, so prevalent in the youth of today, will become one of vigor and determination. Thus, instead of fearing the loss of human values as the price for technology, we may positively enhance these values by assisting young people to live usefully, and in harmony with their radically changing environment.

IVOR J. MILLS

## Not Everything is New

Nelson, B.C.

Sir,

Sitting here reading *The B.C. Teacher* in the cozy comfortable warmth of my retirement I can only conclude that there is nothing new under the sun and that I have been born out of my time. So many of the new ideas and innovations have been tried before, sub rosa, in the days before New Thought.

I congratulate Reynolds School on having the lid off, though I think it is rather late in the day. The Central Elementary School had that 20 years ago. When I was appointed principal I decided there would be no playground supervision and we, my colleague and I, were tired of beating up boys for infraction of rules. Twenty in one day, as he said, were too many.

To our surprise, conduct on the playground improved and from that began the no-rule school where the pupils were entirely the judge of what was proper conduct. Every year when the beginners came to school I made a point of visiting their classrooms often, partly because I like little children but also to tell them that at six they were old enough to know what was right and to do it.

Every year, too, I made a point of visiting my senior grade classes and congratulated them on being the top classes of the school and asking them to look after the little newcomers. I would point out they were very wonderful people in the eyes of these beginners who would copy their behavior, so they must be sure it was good.

By learning the names of all the beginners I was able to know each child in the school and be on friendly terms with them all. I did not talk of school but of things which might interest them. I would ask after their mothers and fathers and in so doing I became aware of their background.

All this meant that my work was not mainly in the office but in the classrooms. If I could, I would visit each every day, to see the children, as I was careful to explain to the teachers. I believed that they did their best work if I left them alone and the standard of achievement was always high, since they were always relaxed and happy in their classes.

It all seems easy, as indeed it was, but much depends on the understanding and co-operation of the teachers.

It will not be easy at Reynolds School. The children will be older and at a difficult age. Many of them will come, perhaps, from substandard homes and others from schools where the discipline is still the old fashioned 'do as I say—or else' type which means no self-control or responsibility for the pupils.

It will not be easy for the pupils or the teachers, who will have to forget their sober-faced authoritarian role and become the smiling mentor who is not concerned with rules but has the understanding heart. Then discipline will grow, as it should, among the pupils.

I wish Reynolds success; may their example inspire others and encourage those who believe that the teacher's job is not to enforce discipline but to inculcate self-control and pupil responsibility.

FRANK B. PEARCE

## The School Week in Europe

Victoria, B.C.

Sir,

A recent article in *Paris Match* reveals some problems that seem interesting to me and I would like to share them with other teachers.

Apparently, some teachers in France want to change the teaching week to Monday to Friday, with the whole weekend off. This would be quite a change from the situation now, where the children have Thursday off (secondary schools often use Thursday morning) instead of Saturday.

The work-week for schools in France is generally 30 hours for elementary schools and 26 hours for secondary schools. In Germany there are 24 hours a week of school. The elementary school children attend from 8 o'clock to 12 noon; secondary pupils average 36 hours, and the main courses are from 8 a.m. to 1:30 p.m. In Italy, 25 to 30 hours are spent in classes, which go from 8 a.m. to 1:30 p.m. for all. Belgian schools have 26 hours a week in the elementary schools and 35 hours a week for high schools, with either Wednesday or Saturday free.

In Denmark 33 hours of classes are average and all classes are from 8 a.m. to 2 p.m. with a half-hour a day for sports. Great Britain has 25 hours of school and often two hours of sports after 3:30 p.m. Saturday morning is often reserved for sports.

But the real problem—whether to change to the long weekend or not—is still in hot debate. The national Minister of Education, Mr. A. Peyrefitte, suggested that the workload for students is heavy for all students in France, and especially so for small children, and that the limit has been reached. He thought that by Wednesday evening children are ready for a break. Mr. Peyrefitte also mentioned that the French vacation—which is the longest in the world—coming after the short work session did not encourage one to consider the alternation of long periods of work followed by long periods of leisure.

The minister favors making courses lighter, but does not think that the 'continuous' day (as in Germany) without a lunch hour is a good solution because of the long periods of the day when children are not being supervised. He mentioned the possibility of rearranging the school year so that a longer year would make the workload lighter. However, he declined to vote in favor of the break in the middle of the week or the longer weekend.

So of all the many problems of education here is another to consider. Are we better off here in B.C. with the week we have? Perhaps we should enquire about our work-week and make it longer or, maybe, shorter.

HUGH MOONEY

C. D. NELSON
Book Review Editor

WE'RE SORRY

to have to tell our readers and our reviewers that, even before the January issue was off the press with Don Nelson's editorial comments on his pre-Christmas spell in hospital, we received word that he had been rushed back to hospital, quite seriously ill.

We have assured Don that his only job now is to get well and that we shall do our best to carry on for him.

To that end, we now ask Don's reviewers to send their reviews directly to us at the BCTF office, as soon as they possibly can. The address is #105 - 2235 Burrard Street, Vancouver 9.

May we have your help, reviewers?—KMA AND ABM

## DRAMA

*Practical Stage Make-up*, by Philippe Perrottet. Studio Handbook Series. Studio Vista Pubs., 1967. (Can. Agt. General) $7.75

The author suggests that writing about the art of stage make-up is an almost impossible task. So much can be said and illustrated. The fact that one may have an extensive personal experience only serves to complicate the issue when it comes to saying 'how-to-do-it' in print with any effect. The end result in many publications on the subject is often a frightening array of conflicting technical data, photos and color charts that convey very little useful information to the reader.

This new book avoids these pitfalls, although it is definitely *not* yet another of those 'make-up-made-easy' efforts. In fact, the author, in a very tightly written text, clearly indicates the problems and offers solutions in straightforward terms. His sense of humor and candid approach makes the reading enjoyable. On the question of Ageing the Face he says, 'To achieve this with make-up, one must first study one's facial structure, and see where the rot will set in.'

The text deals with make-up for plays, ballet and opera. There are 32 pages of outstanding photographs, many line drawings and a concise list of equipment and materials, giving prominence to the Max Factor and Leichner range. One suggestion to the publishers would be that they include the names of Canadian suppliers along with those mentioned.

Here is a book that deals comprehensively with the subject in an up-to-date and professional manner; a book that should make a welcome addition to school libraries, theater departments and to all those who are in any way connected with the art of the stage.—John Getgood

## ENGLISH

*The Uses of English; Guidelines for the Teaching of English from the Anglo-American Conference at Dartmouth College.* Holt, Rinehart and Winston, Toronto, 1967. $2.95 paperbound

In the late summer of 1966, 50 educators from university, secondary and elementary schools met at Dartmouth College in the first large-scale Anglo-American seminar on the teaching of English. Despite their backgrounds of basically different school systems and traditions, they managed to engage in an international dialog to arrive at some reasonable consensus on what is wrong with the teaching of English and what ought to be done about it.

This is a report of the seminar proceedings, designed for the general reader. The author, a teacher at Indiana University, presents the various views aired at the

seminar, and adds comments of his own. The topics appear under ten main headings: What is English; Democracy in the classroom; The development of the child; 'Good English'; The uses of literature; Writing and talking; Creativity and drama; The mass media and the myth; Examinations and teachers; The issues of responsibility.

A thought-provoking book which should interest not only teachers of English but also principals, administrators and the intelligent layman.—S. R. Laycock

## HUMANITIES

*The Knowledge Most Worth Having.* Ed. by Wayne C. Booth. University of Chicago Press, 1967. (Can. Agt. U. of Toronto Press) $1.95 paperbound

A neat paperback containing a series of ten papers delivered at a five-day Liberal Arts Conference at the University of Chicago. These papers are philosophical and theoretical rather than practical, and the whole content of them is more suitable to students and professors working at the university level than those working in secondary schools. Few of the latter will find time for the quiet moments of thought and consideration needed for this worthwhile but inconspicuous volume. Those who do will find it rewarding. It contains, among other things, a paper on the education of women written, believe it or not, *by* a woman. The sheer novelty of this is impressive, after these many years of having the subject dealt with at great length and little authority by men.

There is no index, bibliography, or illustrations, but none are needed. Explanatory footnotes are given with some of the papers. Contributors: Wayne C. Booth, F. Champion Ward, Northrop Frye; Sir John Cockcroft; John A. Simpson, John R. Platt, Anne Firor Scott, James Redfield, Richard McKeon and Edward H. Levi. This is an honest attempt to evaluate the worth of the humanities in the present time.

—Faith E. Lort

## MISCELLANEOUS

*At the End of the Garden,* by Marion Stavrakov. Mitchell Press, Vancouver, 1967. Price not quoted

This is a collection of animal stories and short poems for children from Grades 2-4. The animal stories are run-of-the-mill, with slight plots, but there is suspense and action which appeal to young children.

The strength of the volume lies in the five poems, which have considerable merit. They mirror the young child's world, and the poem 'October' is a personification of autumn, and will lend itself very well to a poetry study.

The illustrations are in tones of brown, grey and white, and suggest stuffed animals and piggy banks. The format of the book is attractive, with wide margins and good-sized print.

Congratulations to Mrs. Stavrakov, a British Columbia teacher, on the publication of her first book of fiction for children. She has had published in the past a workbook in the Dent *Growth in Reading Skills* series.

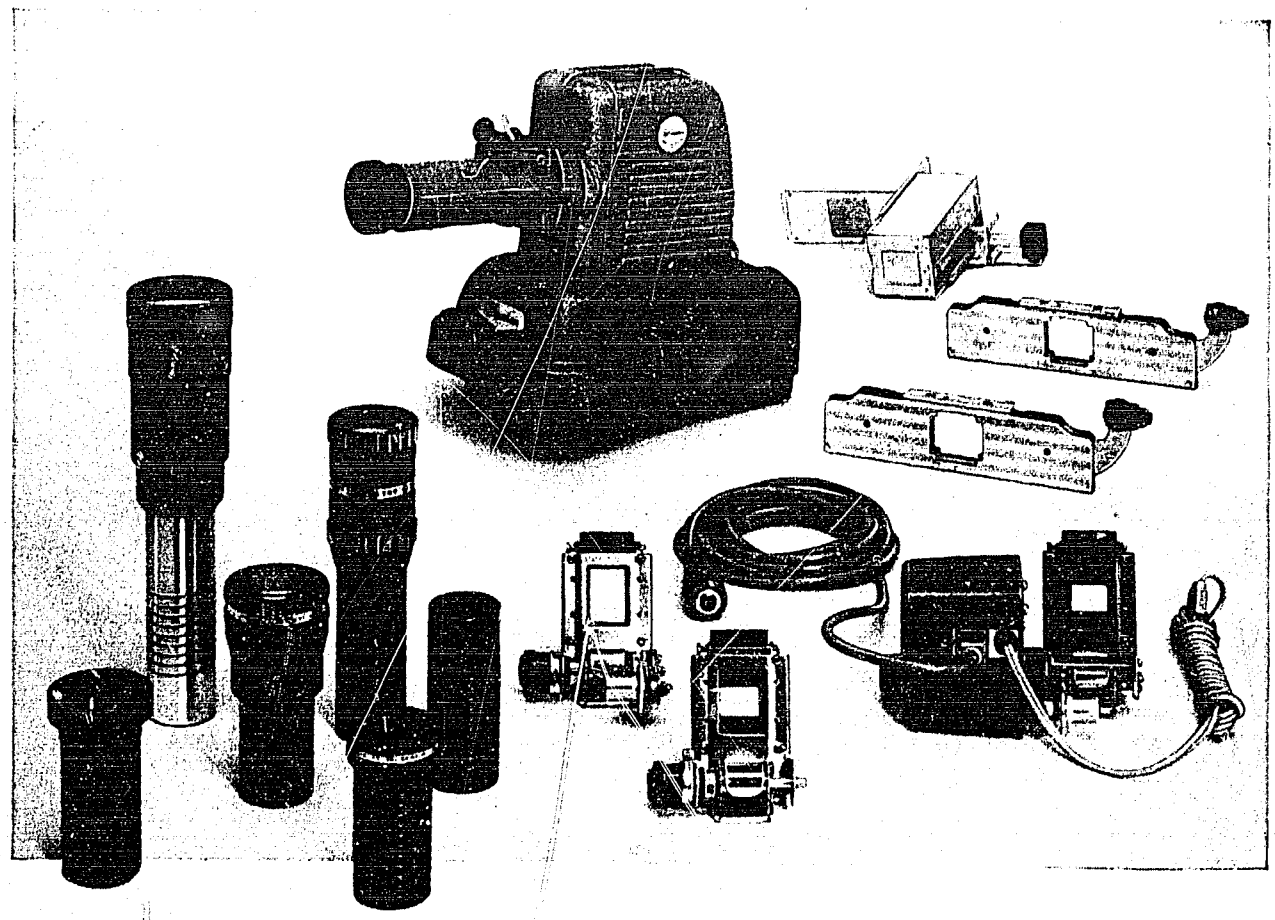
—Pamela C. Harder

*The Teacher's Survival Guide,* by Jenny Gray. Fearon, Palo Alto, Cal., 1967 (Can. Agt. Clarke Irwin) $2.20 paperbound

This is an attractive paperback, on good quality paper, with amusing black and white line drawings by Robert Haydock. There is a two-page index which refers the reader to such topics as 'Cheating,' 'Counsellors,' 'Profanity.' There is no bibliography. The author's purpose, stated in the preface, is 'to help the novice over the discipline rough spots so that his classroom time can be devoted to teaching rather than policing.'

The style is amusing and entertaining, and the various facets of school discipline are dealt with in logical steps. The book is full of commonsense advice, often so logical that one's reaction is apt to be 'Surely every one knows that'; or 'Why didn't I think of that myself?' On the negative side, it seems to me that the author is unduly apprehensive about discipline. To test this out, I gave the book to two bright senior secondary school students to read. Their reactions: 'It seems to me this teacher is expecting an awful lot of trouble.' 'Nothing that bad ever happens in our school.' Are we finding trouble because we look for it? Do we create trouble by being on the defensive, or are we just interpreting as 'bad,' things which the students themselves don't even see because they consider them 'normal'? If one were faced with the situations described, one would find the advice practical. Were I a student, I would resent the overall attitude of condescension represented in this book; a tendency to describe the 'culturally deprived' as though they were subhuman, especially those in their teens. Staffroom humor is seldom amusing when carried over into the classroom.

—Faith E. Lort



# is all this necessary?

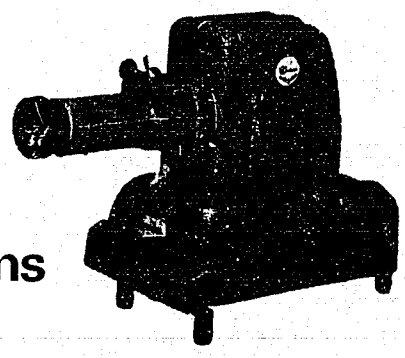
Take a look at the Viewlex V25 system.

By itself, the V25 is an outstanding projector that's easy to thread, is silent and cool-running, and handles every kind of filmstrip, single or double frame, and every format of 2" x 2" slide. It acts just the way it looks—rugged. In fact, it's so rugged and reliable, the V25 is *guaranteed for life*.

Now, add all its lenses, slide changers and accessories and the Viewlex V25 becomes the most complete slide and filmstrip projection system on the market. It's adaptable for use in any size room, with any size screen, before any size audience. It can even be run by remote control.

Is all this necessary? Well, if you want your work to be easier and more effective, if you want to keep interest high, if you want a superb teaching-aid system—it's necessary!

For information about the whole Viewlex line, for a complete AV catalogue and the name of your nearest Audio-Visual Systems dealer, write us c/o Dept. AV-21



**Audio-Visual Systems**

a division of Anglophoto Ltd.
27 Haas Rd., Rexdale (Toronto), Ont.
Montreal: 160 Graveline St., Montreal 9, Quebec.
Vancouver: 1655 West 4th Ave., Vancouver, B.C.

# B.C. TEACHERS CREDIT UNION

Hours of Business

| Tuesday - Thursday | Friday | Saturday | Monday |
|---|---|---|---|
| 9 a.m. - 5 p.m. | 9 a.m. - 6 p.m. | 9 a.m. - 1 p.m. | Closed |

1815 West 7th Avenue
Vancouver 9, B.C.
731-6191

Mailing Address
P.O. Box 4309
Postal Station "D"
Vancouver 9, B.C.

# WATCH YOUR SAVINGS GROW

## *With Our New*

# COMPOUND INTEREST DEPOSITS

## HOW OUR C.I.D. PLAN HELPS YOU SAVE

| Here is what you Deposit | YOU RECEIVE IN 5 Years | 6 Years | 7 Years | 8 Years | 9 Years | 10 Years | C.I.D. Increase | Simple Interest |
|---|---|---|---|---|---|---|---|---|
| 29.27 | 38.26 | 40.36 | 42.58 | 44.92 | 47.39 | 50.00 | 70% | 6.75% |
| 58.54 | 76.51 | 80.72 | 85.16 | 89.84 | 94.78 | 100.00 | 70% | 6.75% |
| 292.70 | 382.55 | 403.60 | 425.80 | 449.20 | 473.90 | 500.00 | 70% | 6.75% |
| 585.40 | 765.10 | 807.20 | 851.60 | 898.40 | 947.80 | 1000.00 | 70% | 6.75% |

- ★ Earnings over 10 years equal **6.75%** simple annual interest on your deposit.
- ★ Possible income tax advantages.
- ★ Your C.I.D. may be coshed at any time for the Accumulated Value.

***A Professional Means of Savings and Service***