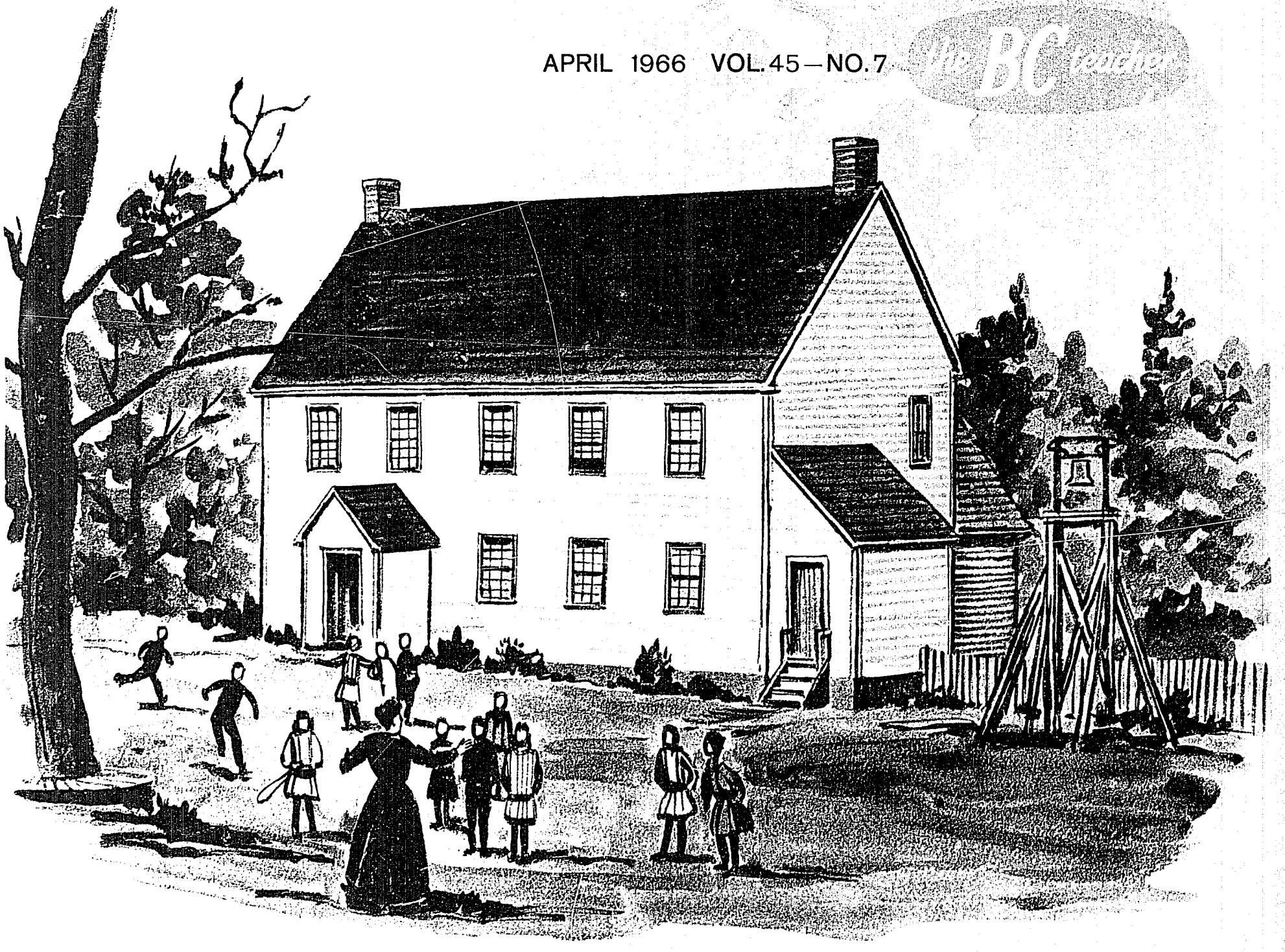
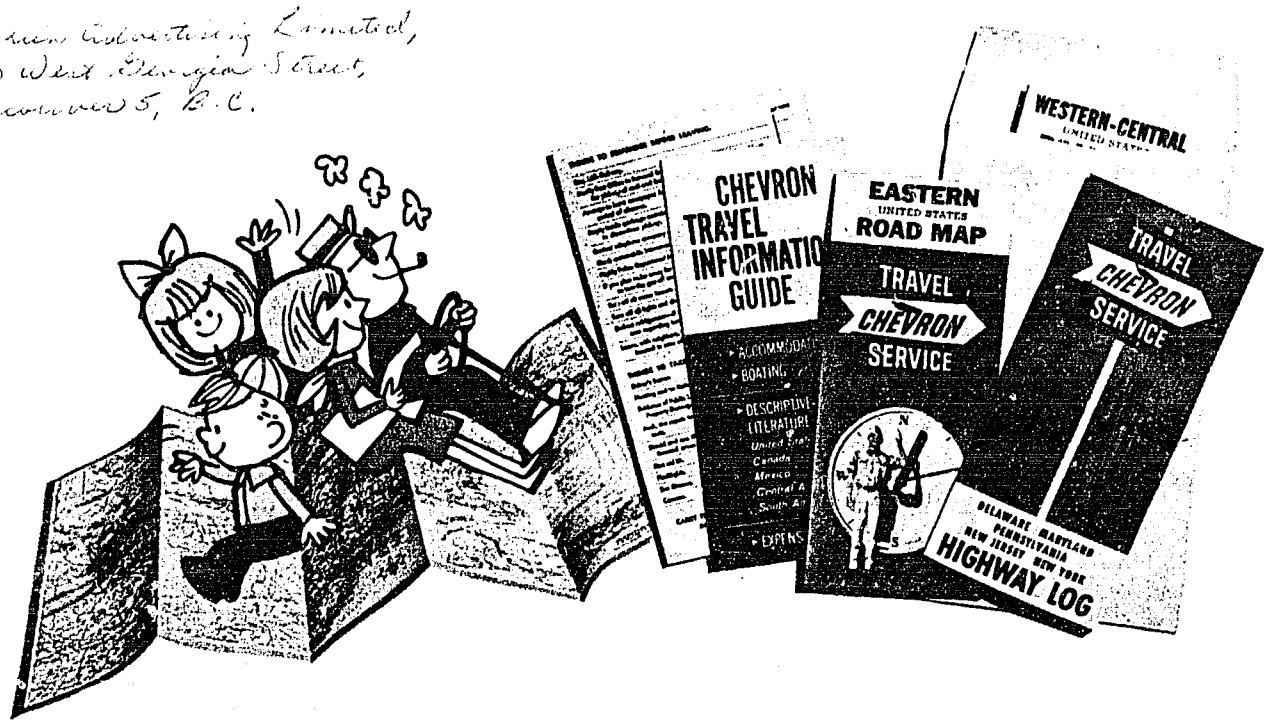
APRIL 1966 VOL. 45—NO. 7

The BC Teacher



270 - 15% = 270 - 40.50 = 229.50

C.B. Bates Advertising Limited,
1030 West Georgia Street,
Vancouver 5, B.C.



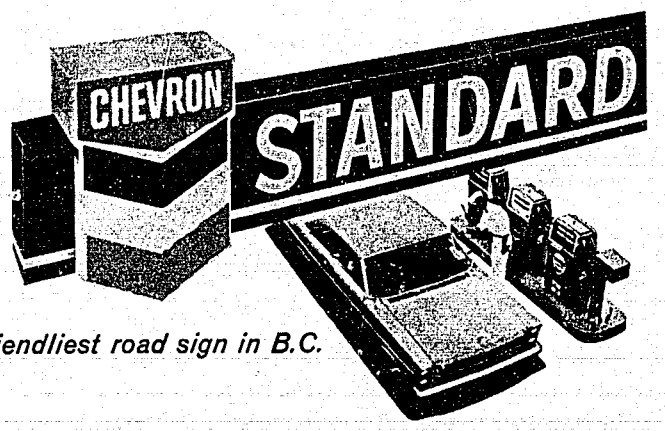
Kiss travel worries goodbye ...with a FREE Chevron Travel Kit

Now, before vacation comes around, is a good time to plan your trip and you can get free trip-planning service at the big red, white and blue sign of the Chevron. Swing in and pick up a Chevron Travel request form. Fill it out, mail it in, and back will come your complete Chevron Travel kit fitted to your particular needs . . . free of charge. It includes:

- **A personalized route map showing your route clearly marked.**
- **A handy checklist of things to take . . . things you must do before you leave.**
- **Highway logs that describe points of interest along the way.**
- **List of hotel, motel, campsites and trailer accommodations — mileage and expense record.**

And when you travel, look to Chevron Dealers and Standard Stations for provincial, state and city maps — and helpful local information. It's all yours, free at the sign of the Chevron.

The Chevron ABOVE ALL ...means service

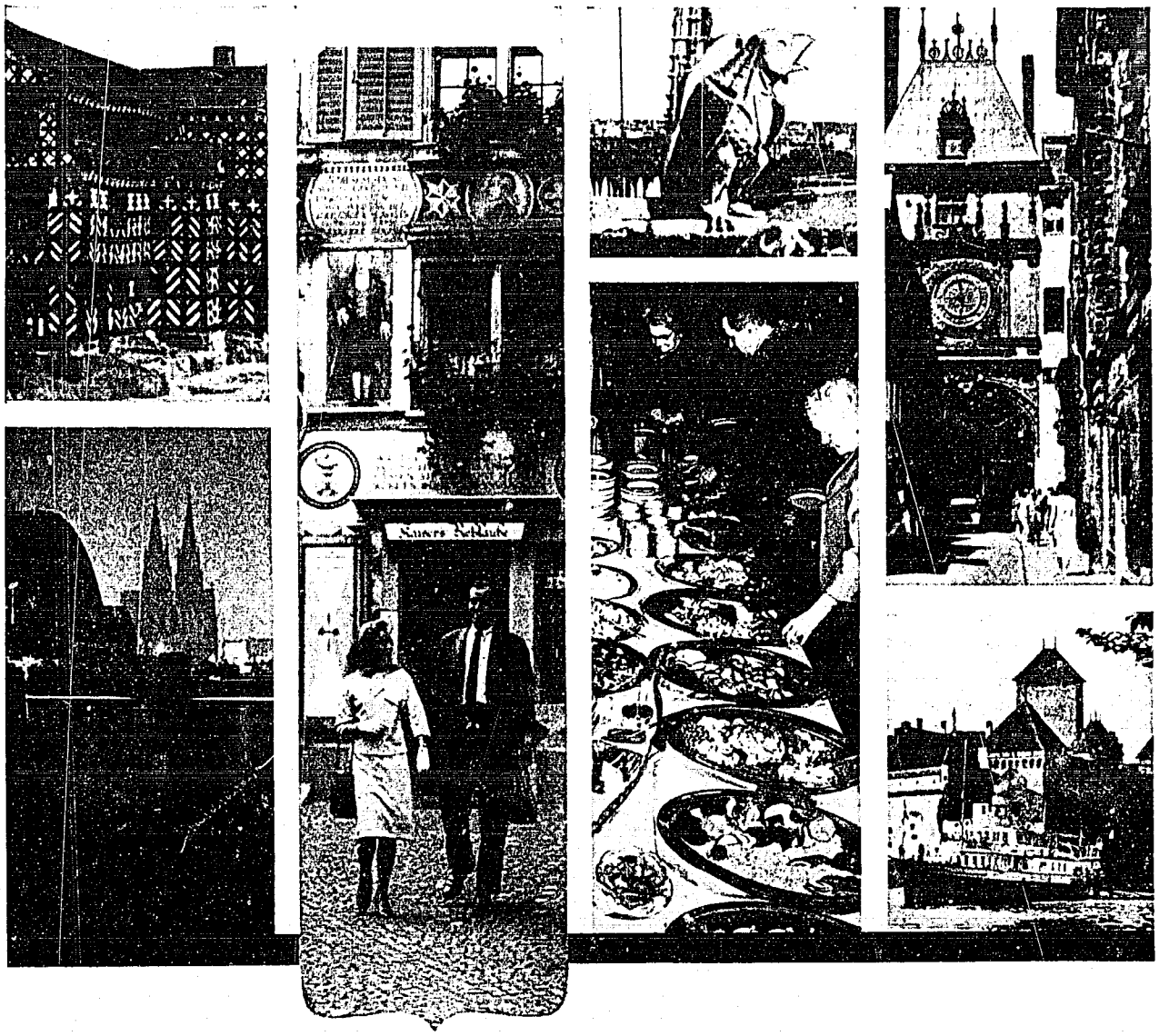


friendliest road sign in B.C.

270 + 25% − 10% = 270 + 67.50 − 33.75 = 303.75

Cockfield, Brown & Company Limited,
260 Carnarvon Cornwall Building,
Montreal 2, Quebec.

270 - 15% = 270 - 40.50 = 229.50



EUROPE

greatest "refresher course" in the world!

When school is out, make sure you're in Europe on holiday. And that's especially true if you've a penchant for new experiences, new sights, new friends. There's no easier or more pleasant way to get there, either, than by AIR CANADA DC-8 Jet...and, good news, you can still take advantage of 21-Day Economy Excursion Fares! You can even pay as little as 10% down and the balance in up to 24 months on AIR CANADA's Fly Now—Pay Later Plan. Why not see your Travel Agent—or call AIR CANADA—for the happy details?

AIR CANADA

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

Notice of change of address, stating both old and new addresses, should reach the editorial office at least one month before publication date.

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

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

Member

EDUCATIONAL PRESS ASSOCIATION OF AMERICA

Printed by Evergreen Press Limited

the BC teacher

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

VOLUME XLV, No. 7 APRIL 1966

TABLE OF CONTENTS

Cover Picture

Craigflower School, Victoria, now a museum, is the subject of our cover picture this month. The painting is one of a series by Bob Banks, commissioned by the B.C. Centennial Committee of 1958. Permission to use the paintings was granted by the Provincial Archivist. The cover story is taken from material originally prepared by Dr. F. H. Johnson and W. H. Auld.

Photo Credits

P. 260, 261—Supplied by Superintendent of Schools, Greeley, Colorado; p. 262—Powell River News.

270 - 10% - 15% = 270 - 27 - 36.45 = 206.55 CONTRA

McKim Advertising Ltd.,
1155 Dorchester Blvd. West,
Montreal 2, Quebec.

Canadian Cement Brown & Company Limited,
200 Canada Cement Building
Montreal 2, Quebec.

O/N - V-2440

270 - 15% = 270 · 40^50 = 229^50

PLANNING LESSONS ON B.C.'s FOREST INDUSTRY?

Course material is now available.

Teachers of general science, social studies, general business, and Counselors who are conducting or planning lessons in forest land tenure, management and conservation can now receive free teacher's aids and classroom literature on these and other subjects related to the forest industry. Material available includes teachers' handbooks, student pamphlets and filmstrips, all specifically designed to aid in the clear presentation of information covering all aspects of the forest industry in British Columbia.

Filmstrips are being made available at every secondary school in B.C. Copies of teachers' guides and student pamphlets are available without charge by writing to:

MacMillan, Bloedel and Powell River Limited
Harmac Division,
Nanaimo, B.C.
Attention: Mr. E. G. Stroyan

MACMILLAN, BLOEDEL AND POWELL RIVER LIMITED

McConnell Eastman Limited,
Box 3477
London, Ontario

OIN - 14847

270 - 15% = 270 - 40.50 = 229.50

congratulations vancouver school board

ONE OF THE MOST ENCOURAGING things we've seen in some time is a list of objectives for 1966 adopted by the Vancouver School Board.

To the best of our knowledge, no other elected body in the province has formulated such a list of objectives. The very fact that the Vancouver trustees have done so warrants commendation. But we are impressed, too, by the worthiness of the objectives.

The list includes eight important matters which the trustees want to study themselves, and another eight which they want studied by the officials of the Vancouver school system.

The trustees will study, for example, the possibility of developing a college preparatory program for Grades 11 and 12, gearing the content to the needs of adults rather than of adolescents. Such a program would, of course, have great appeal to adults who dropped out of secondary school but who now would like to go to university.

The Board also plans to improve its liaison with business, industry and community organizations. This move should have a twofold benefit. First, the community representatives should be able to assist the school system to keep its graduates geared to changing conditions. Second, the Board should achieve widespread community support for its projects, for the community will have played a role in their formulation.

Among the matters to be studied by the Board's officials are an experiment in continuous progress (nongrading), pilot projects in better utilization of school staffs, the establishment of special classes for gifted pupils and an experiment in three schools with educational television.

This small sample of the Board's objectives proves conclusively that Vancouver's trustees want to provide the best possible education for each child in their school system. Not that this is surprising; Vancouver has led the way in such other matters as hiring teachers above entitlement, providing remedial reading help for pupils and consultative services for teachers, providing specialist teachers for the elementary schools and authorizing experimentation (e.g., team teaching). The actions taken this year are, therefore, further evidence of the Board's obvious desire for quality education.

A proposed seminar of trustees and officials—another of the 1966 objectives—could well turn out to be the most significant project of all. The seminar will discuss the primary purpose of the school system and will examine the operation of the Vancouver schools in the light of that purpose. Let us hope that this evaluation will result in action to limit the number of students assigned to secondary specialist teachers, particularly those of English and social studies.

From time to time actions of the Vancouver School Board exasperate us. (Why, for example, do the trustees adamantly refuse to sign a collective agreement with their teaching staff?) However, we think Vancouver is fortunate in having as trustees people who are genuinely interested in education. Certainly the actions of those trustees are a convincing answer to the nonsense we sometimes hear about there being no real role in education for trustees.

It is a pleasure, then, to salute the members of the Vancouver School Board. Their list of objectives is another of many firsts in attempting to provide quality education for the children of our province's largest city. □

MADELINE C. HUNTER

Principal, University Elementary School, University of California, Los Angeles. Reprinted with permission from NEA Journal.

TEACHERS IN THE NONGRADED SCHOOL

CHANGES AND NEW DECISIONS bother all of us. I was beset with misgivings the moment I found that the ignition switch on my new car was on the left instead of on the right side of the steering wheel as it had been in my former car. These uneasy feelings started to compound as I began to suspect manufacturers of sadistic perverseness. The drive selector on this car was also in a different place, the drive positions were not what I was used to, and I had to set the emergency brake by hand instead of by foot.

As I fought through the maze of new 'feels' and places for my hands and feet, with typical human resistance to change, I regretted turning in my comfortable old model. It was too late to reverse my decision, however, so with the skills (and attitude) of a six-year-old with mixed dominance I decided to take my elderly mother for a ride while I got used to the recalcitrant mechanical monster.

'Whatever are you doing?' Mother asked in amazement as I lost my usual complacency and muttered a string of descriptive phrases which are best forgotten.

'I'm trying to decide which drive position to use,' I explained snappishly.

'I'm glad that when I was learning to drive, the horse made most of those decisions,' she said, primly smoothing her skirts.

Horse sense indeed! But oh how much more comfortable and effective is my new car, now that I am used to it.

I had the same problem of adapting to change when I first started using the 'gear selectors' of nongrading. As a teacher in a nongraded school, it was up to me to make recommendations as to how each individual in my present class should be placed next semester. Which of my fellow teachers would bring out the best in Johnny? Should Mary and Sally continue to be in the same group or should they be separated? This decision-making brought into devastating visibility my lack of knowledge of that great middle group in my class—those children who learned just enough and conformed just enough that they never had received my full educational concern.

Once the students were assigned to instructional groups, major learning decisions became the responsibility of individual teachers, rather than of the curriculum council or the textbook committee. No longer could the same graded materials be dealt out to an entire class; every teacher had to make professional judgments as to which book and which level of content was appropiate for each child in his class.

The use of educator decisions rather than system decisions is the hallmark of the truly nongraded school. Why do I say 'truly nongraded'? Because if you are a teacher in an elementary school that assigns students to a levels program or that groups learners in different classrooms according to ability and achievement, you have eliminated astrology as the guiding principle for placement of children, but you have substituted something not much better. In place of

numerals representing the date of birth, you have substituted the numerals from the score of a reading, general achievement, or intelligence test. Such a score is designed to give normative data for large groups; it is not supposed to yield diagnostic data relevant to the optimal placement of individual children in instructional clusters.

Each September, those of us who teach in a nongraded school greet a group that differs radically from those in most other classrooms. The boys and girls have not all been born within a certain twelve-month period and teachers, therefore, do not have to depend on some fortuitous juxtaposition of the planets at the time of their birth for all to go well. Learners assigned to any one teacher have been diagnosed as responding well to that teacher's style of teaching. Likewise, the sociometric composition of each group has been designed to foster the optimal growth of individual members.

What a refreshing relief it is for teachers to know that each child is beginning the year with a fresh start; that they don't have to brace themselves in anticipation of one of those class groups that moves as an indigestible lump through the school.

Decisions regarding teaching style and peer group that have already been made about class membership help to eliminate such undesirable stereotypes as 'worst reader,' 'poor sport,' or 'sloppy worker.' Similarly, positive reputations such as 'best reader,' 'most popular girl,' and 'team captain' need to be re-earned in the new group, thereby strengthening an ability that has been manifested.

Everthing possible has been arranged in advance to optimize learning and now it's up to the teachers. It is quite a responsibility! No longer can anyone take refuge in the excuse, 'He didn't even have fractions in *her* room so what do you expect *me* to do?' Teachers are expected to teach each pupil from wherever he is to as far as they can take him.

No longer is the goal to cover certain material (much of which should be 'covered' and appropriately laid to rest). The question changes from, 'Has the student done it?' to 'Has the student learned it?' We, as teachers, must be able to confidently answer 'yes' before moving on.

Selecting for the learner an appropriate task at the correct level of difficulty is the responsibility of each teacher in the nongraded school. This implies assessing the effectiveness of each day's teaching—a task not always conducive to the wellbeing of one's ego. The fact that a teacher thinks he has taught base ten gives him no license to go on unless he is sure it has been learned.

In a nongraded school, teachers facing, for the first time, a three-year age span of learners are appalled by the anticipated range of abilities. After a few weeks they are further shaken by the realization that they do not know which children are the youngest and which the oldest without looking it up.

After changing to nongrading, one experienced first grade teacher came to her principal complaining, 'I can't teach five-, six-, and seven-year-olds in the same class. Why, some of them are not even ready to read, two can read at a third grade level, and one can read at a fifth grade level.'

Upon investigation it was discovered that those not ready to read and those reading at third and fifth grade level were all six-year-olds. In the typical first grade class the wiggly, twitchy little six-year-old boys would have been 'excused' from the reading group. ('John, take your book and sit over there until you can listen.') The able six-year-old readers would have willingly read 'Run, Sally, run,' to please such a nice teacher.

Because this teacher was in a nongraded classroom she was forced to the disquieting realization that the typical first grade reading program is inappropriate for some six-year-old children, yet perfectly appropriate for some five- and seven-year-olds. Nongrading does not necessarily assure a wider range of abilities; it does inexorably force teachers to make educational provision for the range they have.

Placement of children, using the criteria of teaching style and peer group composition, presents a new and often unexplored area of decision-making for teachers.

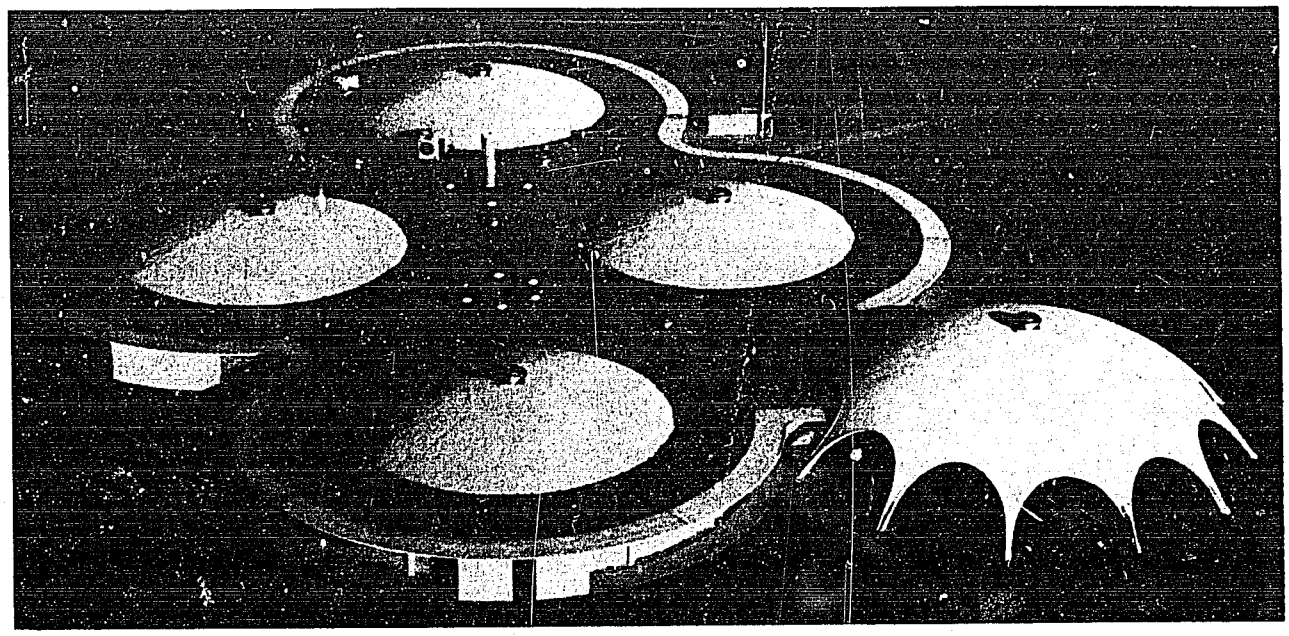
When a teacher in a nongraded school was asked what instructional group she would recommend for seven-year-old Howard in the coming year, she replied, 'Give him a teacher who will really get after him. His mother has babied him so that he needs someone who means business.'

The next day, however, Howard's teacher amended her recommendation by saying, 'I've been watching Howard. When I ran late in my art period and started snapping out orders for cleanup, he just went to pieces. I've decided that he needs a teacher who is not too strict and who will give him support. At the same time, he needs a peer group that will really push him intellectually. He has such a quick mind that the children in his present group never challenge him enough to force him to refine his ideas.'

The following day, Howard's teacher came to the office a third time. 'Someone told Howard, "Gee, that was a lousy picture you made" and Howard burst into tears, so I guess he's not ready for too much challenging.' She concluded with, 'You must think I can't make up my mind, but I'm not used to making these kinds of decisions.'

None of us is used to making these kinds of teaching decisions. They represent a new and rigorous dimension in the process of education. These decisions, also, represent the impact of recent research which indicates that a powerful educational environment can make significant and pervasive changes in the individual.

Continued on page 295



Three circles of this new elementary school in Greeley, Colorado, contain clusters of classrooms, all with easy access to a central resource center. The fourth circle has kindergarten rooms, a speech and remedial reading room, music room, cafeteria and kitchen, and offices.

A NEW LOOK AT SPACE

J. W. LOTT

BEFORE TOO MANY PHYSICISTS get involved in this article, the space under discussion is space for learning, not the space of the astronaut and the satellite. Although not as dramatic or sensational as the quest for knowledge beyond the limits of the earth, the search for answers to questions concerning the type of space in which learning can best take place is a vital one.

The setting of new aims for education, the introduction of curricula to achieve them, and the development of fresh teaching techniques, have made a reappraisal of space for learning necessary; modern methods of construction and a variety of new teaching materials have made the reappraisal possible.

It is doubtful that the ideal learning environment is about to be designed and probably undesirable that one should be. What might be an ideal space to learn in today will surely be undesirable tomorrow. In any event, it is unimportant whether or not we find the ideal; what is important is that we be aware that existing learning space is inadequate and that we seek for something better.

The search is already producing stimulating new schools and classrooms. It has resulted in the modification of many old school buildings. It has created a demand for flexibility in the division of space which has produced classrooms with moveable walls and even a few without walls.

In B.C. with new aims, new curricula, and new teaching techniques, we have a particular need to take a new look at space for learning. Our province also provides the opportunity, in the many new schools and classrooms that must be built each year.

The BCTF has realized the need and recognized the opportunity. In 1964 it established a special committee on School Buildings, whose primary function is to consolidate teacher ideas on the environment in which they work, and to communicate these ideas to the Department of Education.

In meetings with officials of the Building and Plan-

The author is chairman of the BCTF School Buildings Committee.

ning Division of the Department, the School Buildings Committee has found that the Department, too, is approaching the problem of space with a new awareness. The standard plans published in the 'Black Book' are no longer intended to be prescriptive but are guides to planning and design. Innovation is encouraged and approval has been granted for several imaginative and exciting school plans. In producing new plans as guides for future classrooms, the Planning Division is guided by the demands of the new curriculum and will redesign learning space to fit redesigned programs. The recent space provisions for science are a good example of this, since they reflect the space needs of the new science curriculum.

Encouraged by this development in Departmental thinking on learning space, the BCTF School Buildings Committee has embarked on two projects aimed at producing new environments for social studies and primary instruction. The designing of a new primary environment was suggested by Dr. Henry Elder and Professor Robin Clark of UBC's Faculty of Architecture. The actual designs will be turned out by teams of architecture students working on ideas gleaned from interviews with primary teachers. Members of the Primary Teachers' Association have volunteered to work with students in Professor Clark's third year classes.

Primary teachers met with Dr. Elder and Professor Clark in February to discuss the project and interviews between teachers and design teams were planned. Toward the end of April or early in May the School Buildings Committee will be seeing the results

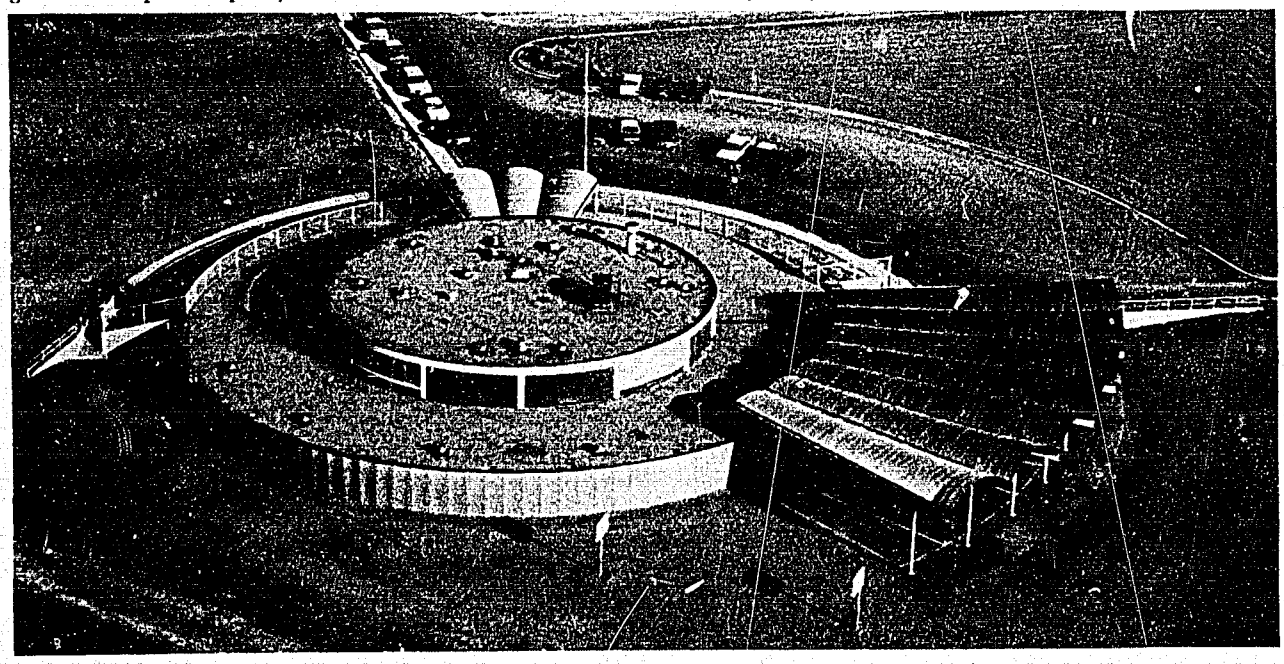
Both Dr. Elder and Professor Clark have supported the Federation's interest in tackling the space problem. The ideas they have expressed at several meetings with the committee are most refreshing and will no doubt influence their students to produce some exciting primary environments.

The social studies are currently under revision and the School Buildings Committee felt the time was ripe to examine the space requirements of the proposed curriculum. A project involving the B.C. Social Studies Teachers' Association has been launched to define the facilities and equipment of a social studies area. Plans developed some years ago by the Fraser Valley East social studies teachers have provided the base for the project. When the new social studies curriculum is announced by the Department, a teacher-designed plan for the space in which that curriculum will be carried out should be announced with it.

There is a multitude of other space problems to be tackled; many special learning areas need a new look. The more general areas of the school, outside the actual classrooms, should be re-examined. The School Buildings Committee plans to examine them, to gather and consolidate teacher ideas, and to communicate its views to the Department.

The opportunity exists for teachers in many districts to express their ideas and take part in school planning. They should take advantage of this opportunity. Guidance and information can be obtained through the committee. As new learning space develops in the schools of B.C., the ideas of teachers should be the major feature in its design. □

The top half of the central core of Brentwood Elementary School in Greeley contains the cafeteria and kitchen, a mechanical equipment room and one kindergarten room. This frees the ground floor space for purely instructional use. The school is built on a sharply sloping site.



Mr. Mattenje and Mr. Hibberd demonstrate a Malawi handshake for Mr. J. Devlin, principal of J. P. Dallos Elementary School, and one of his pupils.

LIKE RIPPLES IN A POOL

LIKE THE RIPPLES that spread from the spot in a pond where a stone is tossed, the influence of a good deed spreads. It crosses oceans, climbs mountains, breaks communication barriers and, most important of all, touches the hearts of people. It can foster understanding and goodwill between the peoples of different nations and different races—and it can do all this without the intervention of governments. It can happen between 'ordinary' people.

Article supplied by Canadian Teachers' Federation Distribution Service.

It can make it possible for a young man from the center of Africa to walk down the street of a Canadian town and be greeted with affection and respect by children. It can open doors and hearts, and change for the better the lives of people on two continents. And those who are doubtful can ask Dick Mattenje or Dick Hibberd, for they were present when the 'good deed' started to spread the ripples, and they have seen just how far those ripples spread.

Dick Mattenje is a school teacher from Malawi, one of the new, young countries of Central Africa. He is

Continued on page 285

P. COLEMAN, W. S. SIMS and W. THUMM

academic programs at the british columbia institute of technology

ABOUT ONE-FIFTH OF THE CLASS graduating on the Academic and Technical Programs in 1967 and subsequent years will seek higher education at the British Columbia Institute of Technology. Few of the present teachers of these students have had an opportunity to find out what the BCIT will demand. Consequently they have no idea how best to prepare their students for a type of higher education which differs extensively from the traditional university offering in objectives, curriculum, and even to some extent in teaching methods.

The stated objective of the Institute is to provide trained workers, in the semi-professional category, for industry and business. This objective is reflected in the attitudes and motivations of the students who tend to be single-minded in their interests, and work very hard—50 hours a week in classes and on assignments seems to be about average.

Both the curriculum and the teaching methods follow from this central objective. The curriculum for each 'Technology' (e.g., mining) is the outcome of recommendations by an advisory committee of experts in the field, and the teaching of the curriculum emphasizes laboratory work very heavily. The laboratory sessions, in general, present facsimiles of business and industrial situations (in, for instance, a miniature plywood mill or a fully equipped TV studio) within which context students are required to solve realistic problems.

In addition to work in their technology, all students take 'core' courses offered by the Academic Departments (English, mathematics and physics), and in these courses the student depends very heavily on his high school preparation. The statements which follow were prepared by the heads of these departments and emphasize the differences between University and Institute requirements and approaches in these core courses.

ENGLISH

The *Applied Science and Technology Index* abstracts 222 journals. The technical report written during the development of the antenna system for the Titan III space booster makes a stack almost five feet high. Of 55 colleges and universities surveyed by students in a Technical Writing course, 50 offer a course in technical writing. Obviously, in businesses and industries which rely increasingly on technology, more and more people are going to be required to read and write technical material. Our schools have not yet taken this into account in their English curriculum.

Joe Smith-Jones graduated on the university program 1965, Any Secondary School, B.C. Joe is less than enthusiastic about English, and has written about five essays a year. (Sample topics: *The Kon-Tiki Expedition.* Book Report No. 2; The Nurse in *Romeo and Juliet.*) Joe registers at BCIT, and at the first English seminar is given a reading test. He is average for BCIT entrants, a Grade 10 reader. He badly needs remedial reading work, to reduce his study time, but his 35-hour class-week leaves little time for remedial work in English. In the second seminar he is asked to write a verbal description based on a diagram of a simple object. (See Figure 1.) In 50 minutes he fails to work out an accurate way of describing the notches. At this point Joe's academic future looks gloomy. He has been prepared to some extent for English 200, but not at all for a course in technical writing.

Training in writing in the secondary school is subordinated to training in literature, and what writing students do is often closely associated with the study of literature. The value of the ability to write good description of objects and processes, and its importance as training for any kind of writing, has commonly been underestimated by teachers. Consider the following topic: 'The diagram shows an exploded view of a flashlight. Write a complete and precise description of the object, and (b) the process of assembling the object.'

The advantages of such topics to the teacher are substantial:

The authors are heads of the English, Mathematics and Physics departments, respectively, at BCIT.

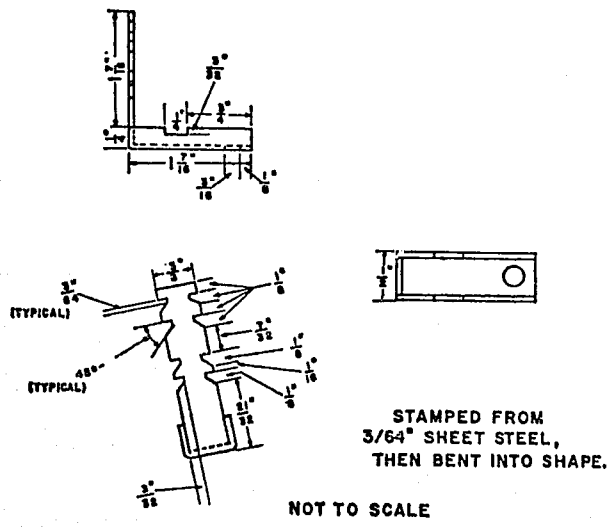


Figure 1*

1. Working with concrete objects helps the student develop concepts which form the logical bases of writing—concepts of categories, of co-ordination and subordination, sequences, and so on.
2. The job of illustrating organization in written material becomes very much simplified. The components of the object, or the steps in the process, become the parts of the essay.
3. Marking is simplified, and can easily be carried out by students, on the basis of a model answer and a simple point system for mechanical errors.

The students, too, will appreciate such topics. The frustration with abstract topics which require sophisticated analysis of personal experience is ended, and the complaint 'I can't write an essay because I can't find anything to say' is no longer heard. In addition, the task of justifying the grades he receives to a weak student is simplified and such students gain confidence from understanding what they did wrong.

A program of about 30 technical assignments, carried out over two or three years and linked with a reading improvement program, could not fail to produce a secondary school graduate who was a competent writer. He would be very much better prepared than the present graduate for employment, for enrollment at BCIT, and even, perhaps, for university work.

At the present time this fundamental training is carried out at the Institute in the first year. Only in the second year do the students undertake any advanced work in technical writing, and the level of proficiency achieved is far from satisfactory, in view of the importance of technical writing in modern industry.

MATHEMATICS

In most of the technical programs at BCIT the mathematics courses extend over the full two-year period, for five hours a week. The students are brought together in groups of about 120 for three one-hour lectures a week, while the remaining time is spent discussing the subject matter of these lectures in small 'sets' of 15 to 30, each set having all its students from the same technical program.

The main topics presented in the courses are: (a) algebra, trigonometry, and analytic geometry, beyond the Grade 12 level; (b) descriptive and inferential statistics; (c) the calculus, to differential equations. Such special topics as the algebra of switching circuits and harmonic analysis are included where necessary. At various points throughout the whole program appropriate items from the field of numerical analysis are introduced, and at an early stage the students are taught how to set down the associated manipulative work in a logical pattern for systematic evaluation on electric desk calculators and programmed electronic calculators using the punched card system. In the second year the students have a course, separate from the mathematics course, on programming for the IBM 1620 computer. The Fortran language is taught and there are laboratory periods for applying mathematical problems to the 1620.

In technological training the direction in which the mathematics discussions have to be steered is quite clear. It is of first importance that the students appreciate the applicability of mathematics in the various technical fields and develop the facility to describe certain situations in mathematical terms. From the beginning the students are made to understand that quite often their mathematical problems will commence with verbal or diagrammatic descriptions of physical situations and that their task in dealing with such problems is threefold. Step one is to translate the given details into a mathematical symbolism; step two is to manipulate the symbols to obtain the desired mathematical solutions; and step three is to interpret these solutions as physical answers. The initial difficulty is almost invariably with the first step, that of formulating mathematical expressions and equations from the technical details presented. The Mathematics Department is concerned about this, for clearly the person who has little ability to analyse basic physical situations by mathematical means cannot be rated a first-class technologist. Hence particular emphasis is placed throughout the program on the analysis of technical problems, and in this connection close liaison is maintained with the Technology and Science Departments for information on the types of problems introduced there in which mathematics is an important feature.

With much of the mathematics teaching at BCIT centered on physical problems, there is continual need for sustained thought on the part of the student to follow through the stages of formulation, manipulation, and

*From *Casebook for Technical Writers* by James Brown. c1961 by Wadsworth Publishing Company, Inc., Belmont, California. Reprinted by permission of the publisher.

interpretation. Test and examination questions are largely of the longer essay type, to check the students' ability to apply continuous thought to such a problem and to present the pattern of its solution in a careful and logical manner. It must be added that the emphasis placed on the application of mathematics at the Institute is not to suggest that little importance is attached to pure mathematical theory when the various topics are presented. There is definite concern that the discussions shall contain as much rigor as time and student ability permit, and it is insisted that the student exhibit throughout his work a precise use of the mathematical language as far as this has been developed. It is important to know the limitations of the general student-body in regard to mathematical rigor, for too much abstract content at one time can cause the interest in the subject matter to fall off quite rapidly.

The principles underlying the teaching of technical mathematics at the Institute, as outlined above, are also applied within the courses for the Business and Medical Laboratory divisions. In these programs a study of further algebra, graphical work, and some calculus, is followed by a detailed discussion of descriptive statistics, statistical inference, and quality control. Additionally the Data Processing option of the Business Management program, which devotes almost a quarter of its time to computer programming, carries topics such as symbolic logic, Boolean algebra, and numerical methods. Here again the effort is made to maintain throughout the curriculum a proper balance between the theoretical and the applied so that, in the time that the students are at the Institute, a useful mathematical training for the chosen career is provided.

PHYSICS

At the B. C. Institute of Technology, physics, like mathematics and English, is essentially a service subject in that it is designed to provide a certain amount of common knowledge which would extend the view of students beyond their own particular technology while providing them with the necessary specific physics relevant to their own technology.

There are some exceptions to this general approach in that we do offer some second year courses in physics which are highly specialized and directed toward a particular technology. Examples of these are 'Electricity in Modern Physics' as offered to the Electronics Technology, and 'Geophysical Methods of Prospecting,' for the Mining Technology.

Other specialized courses include a short series of lectures in the Medical Laboratory Technician Program and a course in the Physics of Medical Radiography which concerns itself only with topics directly related to medical radiography, that is, electricity and radiation physics.

Details of the above courses are to be found in the Institute Calendar and consequently there seems little merit in discussing them further from that viewpoint.

Our largest commitment in physics is as indicated in the first paragraph: a general course which is required by most of the Engineering Technologies as a background subject. This particular course is approximately up to the Physics 101 level although in some topics we go to higher and in some to lower levels, both in the lectures and in the laboratory exercises. At the moment this course is handled by lectures given in large groups, for example 200 students, while the laboratory work is carried out in sections of 30. We are fortunate enough at the moment to have two fully qualified instructors working in the laboratory with each group of 30 students.

This favorable staff-student ratio in the laboratory allows for a definitely positive teaching situation in the laboratory and, further, it introduces periodic opportunities for a tutorial atmosphere which follows monthly quizzes. These quizzes count substantially toward the student's final assessments and we feel that we are making good use of them not only for grading, but also, more significantly, for learning. Immediately after the quiz the correct solutions to the problems are discussed, whereupon those students receiving first and second class honors marks in the quiz may sometimes be excused while the remainder are always required to pursue a certain amount of remedial work until the end of the three-hour laboratory period.

As far as the laboratory work is concerned, we insist that all students perform the required experiments at a satisfactory standard but we give no numerical grading. The exercises are planned so that a student may complete the entire assignment during his three hours in the laboratory, provided he has spent something like half an hour in preparation prior to entering the laboratory. Four times a year we ask students to prepare a detailed submission, which we call a technical report, on a designated laboratory experiment, and these reports are graded numerically, thus counting toward the final mark.

One of these four technical reports is based on a laboratory project which the student undertakes during the last two or three weeks of the first year. In this project he receives a maximum of freedom of choice as to what type of experiment he wishes to undertake and a minimum of specific directions. In a way we might consider this as an attempt at the so called 'open-ended' experiment.

The consequence of our approach is that the student acquires a substantial part of his final mark during the term work and the harassment often faced at some universities of having the entire mark rest on a single examination is somewhat obviated.

We do have two technologies which as yet do not require secondary school physics as a prerequisite but which would like their students to have a general physics background. For these students we offer a

special course in what for me is a particularly exciting venture, in that the attempt is being made to bring these people approximately to the first year college level by means of programmed instruction. In this course the book *Fundamental Physics* by J. Orear and the associated *Programmed Manual* are being used.

Instead of the normal three lectures a week, as in the general course for those people entering with secondary school physics, in this special course only one lecture a week is offered. At this lecture some historical aspect may be expounded upon, some of the more difficult mathematical developments in the program may be approached from a different viewpoint, but mostly the lecture is used to perform relevant demonstration experiments. These students have another hour during the week at which they may voluntarily attend to ask any questions relating to the work in the *Programmed Manual* or the associated textbook. After some seventeen years of teaching, I find this hour as exciting as anything I've ever done. Finally, the students using the *Programmed Manual* assemble compulsorily for one hour during the week in relatively small groups, during which period they continue with their work on the *Programmed Manual,* while an instructor is available to check the progress of each student weekly and give individual help. (By and large, students may work on their *Programmed Manual* as and when they see fit and consequently a student has some measure of freedom to proceed at his own pace. The Physics Department interferes only to the extent of suggesting a reasonable minimum pace.)

Since this is our first venture of this kind, it is hard to predict the degree of success that will be achieved. However, I feel very optimistic. Certainly, whereas we are not able to expect the students to achieve the mastery in terms of quantitative problem analysis that the other students who have had secondary school physics are required to achieve, we are able at least to expose these beginners to a degree of physics which is comparable in sophistication. But we do make our demands on these beginners, in terms of mastery, at a lower level. The alternative of this procedure would have been to give these students a lower level physics course, approximating the old Physics 91 course. We feel this alternative would hardly suffice in terms of present technological sophistication.

As far as laboratory exercises are concerned, probably our only significant innovation is that we have a preliminary section which points out the technological applications of the particular physical phenomena to be investigated and, insofar as possible, makes reference to actual industrial equipment of the relevant type which is seen by our students in other parts of our institution.

In due course, when we shall probably no longer have an appreciable number of first year students with the old Physics 91 course nor students without any secondary school physics at all, we intend to switch from our present rather standard fundamental principle approach to a more applied presentation. This proposal is predicated on the fact that the new secondary school physics courses give ample emphasis to the fundamental approach to basic principles.

In the case of the Physics of Medical Radiography, the class numbers between 20 and 30. This situation is delightful insofar as equipment can therefore be acquired in sufficient quantities that all experiments are carried on concurrently with and relevant to the lecture material. Such is, of course, not the case with our major commitment of the general first-year course in the Engineering Technologies where we are at the moment running some 14 laboratory sections. These numbers preclude economically the possibility of all students doing the same experiment during the same week. However, this does not worry us too much because we feel that, with the new secondary school physics programs, the laboratory approach has been applied to develop the fundamental physical concepts, and our physics laboratory work in the Institute might thus justifiably have slightly different objectives. For example, these are our objectives in approximate order of importance (and they are not as one would usually expect them in a physics course for physicists or even engineers at the university, or in a physics course teaching basic fundamental principles in the secondary school):

1. ability to analyse technical problems in terms of physical laws;
2. ability to understand the principles and use of technical equipment in solving a problem;
3. an understanding of the terms 'accuracy' and 'precision' as used in reporting results;
4. ability to keep an adequate notebook and to write technical reports from these notes;
5. verification of physical laws.

How teachers in the secondary schools may aid us has been a question raised on several occasions. First of all, by encouraging those students planning to go into Engineering Technologies to take as much physics as possible. Further, by encouraging students planning to go into other programs, such as Medical Radiography, where physics is not yet a prerequisite, to take at least one course in physics in order to get the feel of some basic physical laws and the way these can be quantitatively expressed. And finally, by helping, somehow, to overcome the cultural bias vis-a-vis girls taking physics. There are increasing technical opportunities for women, which opportunities are often denied them by what seems in our society to be a cultural bias, that is, 'girls don't take physics.'

In closing, I should like to extend an offer to discuss our physics courses in detail, or any parts thereof, with any physics teacher interested; and what is more, I should be delighted to show any teacher our physics laboratory and, in fact, our entire facilities at BCIT. □

Summary of

Salary Scales

April 1966

EXPLANATION OF CURRENT PRACTICE

The salary categories designated EC, EB, EA, PC, PB, PA are based principally upon the classification of teachers for their certification by the Department of Education. Generally speaking, the categories are based upon the number of years of preparation beyond graduation from high school (Junior Matriculation) subject to the provision that at least one of these years must be a year of specific training in teaching techniques. The categories are as follows:

CLASSIFICATION	MINIMUM REQUIREMENTS
EC — Elementary 'C'	First year standing, College of Education. (This was an emergency qualification, no longer offered.)
EB — Elementary 'B'	Second year standing, College of Education. (Since 1962 this is granted on an interim basis only. It is valid for four years and cannot be made permanent without additional training.)
EA — Elementary 'A'	Third year standing, College of Education. (Since 1962 this certificate represents the minimum level of qualification for permanent certification.)
PC — Professional 'C'	Fourth year standing, College of Education. (This certificate represents either a completed B.Ed. degree (elementary program) or the complete fourth year of a five-year program leading to a B.Ed. degree (secondary program).)
PB — Professional 'B'	Fifth year standing, College of Education. (This certificate is granted on completion of a B.Ed. degree (secondary program) or a B.A. plus one year diploma in Education.)
PA — Professional 'A'	Sixth year standing, College of Education. (This certificate is granted on completion of an M.Ed. degree or an M.A. degree in a teaching subject or in Education.)

Summary of British Columbia Salary Schedules (1966)

Special Note: All school districts have P.T.M.S. Plan "A" unless otherwise noted.
Number of teachers shown for each district is full-time staff in September 1965 (courtesy BCSTA)

DISTRICT No.	Name	No. of Teachers	Category	Min.	Max.	Increments	Principals' Allowances, Larger Schools	Remarks
1.	Fernie	74	EB	4190	6550	10 × 236	% of max. PC B.Ed. (elem.), PA (sec., elem.-sec.) incl. prin.	EC paid EB0.
			EA	4720	7200	10 × 248	Elem.: over 2 teachers 8% + 2% per teacher (3-8), + 1% (9-16) + ½% (over 16).	E in secondary $300 plus $25 per year of experience to $600.
			PC B.Ed.	5350	8110	10 × 276	Sec.: 10% + 2% per teacher (3-8) + 1% (9-16) + ½% (over 16).	$150 per 3 units Summer School up to $300.
			PC	5255	7845	10 × 259	Vice-prin.: ½	Full credit for Commonwealth and U.S. experience if recognized in part by Department of Education.
			PB	5990	9380	10 × 318, 1 × 210	Dept. Head: $400 + 1 inc. of $100	IE with Journeymans' papers plus a teaching certificate, paid scale + 3 increments to maximum.
			PA	6360	10070	10 × 340, 1 × 310		
			PA Mas.	6360	10440	12 × 340		
2.	Cranbrook	118	EB	4100	6400	10 × 230	% of max. for certificate held.	On appointment credit for EB, EA and PC limited to 9 increments; last increment granted after Summer School.
			EA	4770	7370	10 × 260	Elem.: 3% (1-5), 2% (6-10), 1% (11-20), ½% (over 20).	Perm. EB + 9 units paid average of EA and EB scales for 3 years.
			PC B.Ed.	5440	8240	10 × 280	Sec.: 3% (1-5), 2% (6-15), 1% (16-25), ½% (over 25).	PB + 9 units paid PA for three years.
			PC	5230	7630	10 × 240	Vice-prin.: ½ percentages on own certification.	Tuition paid for correspondence and extra-sessional courses.
			PB	5930	9460	10 × 330, 1 × 230	Dept. Head: $400, Assistant $200.	Tuition and residence costs for Summer Session.
			PA	6330	9970	10 × 340, 1 × 240		$50 per unit for Winter Session on leave of absence.
			PA Mas.	6552	10319	11 steps, PA + 3½%		Full credit for Commonwealth experience if recognized in part by Department.
			1967					Teachers of slow learners or occupational one or two extra increments.
			EB	4320	6720	10 × 240		
			EA	5030	7780	10 × 275		
			PC B.Ed.	5730	8730	10 × 300		
			PC	5500	8100	10 × 260		
			PB	6240	9990	10 × 350, 1 × 250		
			PA	6680	10540	10 × 360, 1 × 260		
			PA Mas.	6914	10909	11 steps, PA + 3½%		
3.	Kimberley	104	EB	4255	6575	10 × 235	Elem.: over 10 div. 25% of (PC max. + 1 incr.).	E over 50% in secondary paid PC.
			EA	4700	7200	10 × 250	Sec.: % of PA max. 17%-25% (Jr.), 21%-35% (Sr.).	$50 per unit below PB.
			PC B.Ed.	5485	8335	10 × 285	Incrs.: 2 at 5%.	Outside experience paid in full if recognized in part by Department.
			PC	5200	8050	10 × 285	Vice-prin.: Elem.: approx. ½	
			PB	5800	9375	11 × 325	Sec.: 40%-60% in two years	
			PA	6200	9885	11 × 335	Dept. Head: $350.	
4.	Windermere	51	EB	4400	6725	5 × 275, 5 × 190	% of max. PC(B.Ed.) Elem. PA Sec.	EC paid EB0.
			EA	4930	7380	5 × 275, 5 × 215	Elem.: over 5 teachers 6½% + 1½% per teacher.	EB certificated after 1962 restricted to EB7.
			PC B.Ed.	5610	8410	5 × 350, 5 × 210	Sec.: over 5 teachers 12% + 2% (6-10), + 1% (11-20), + ½% (over 20).	E over 50% in secondary taking further training paid PC.
			PC	5460	8260	5 × 350, 5 × 210	Two incrs. of $200.	Fees and $50 a week for short non-credit courses.
			PB	6150	9550	5 × 400, 5 × 280	Vice-prin.: ½.	Full credit for out of province experience on permanent appointment. Payment retroactive to first year.
			PA	6570	10395	5 × 450, 5 × 315		
			PA Mas.	6720	10545	5 × 450, 5 × 315		

DISTRICT No.	Name	No. of Teachers	Category	Min.	Max.	Increments	Principals' Allowances, Larger Schools	Remarks
7.	Nelson	159	EC	3080	4000	5 × 184	% of max. PC (Elem.), PB (Jr. Sec.), PA (other Sec.).	E in secondary taking further training, PC scale; otherwise $200.
			EB	4100	6350	10 × 225	3% (5), 2% (5), 1% (10), ½% (over 20), to max. of 40%.	Full credit for outside experience up to 5 years for secondary, then half credit.
			EA	4550	7050	10 × 250	Incr. of 3% on perm. appointment.	EC permanent paid EB0.
			PC B.Ed.	5050	8150	6 × 310, 5 × 248	Vice-prin.: ½.	
			PC	4950	7900	6 × 295, 5 × 236	Dept. Head: $350.	
			PB	5600	9200	6 × 360, 5 × 288		
			PA	6100	10100	6 × 400, 5 × 320		
8.	Slocan (Based on Arbitration Award in Trail)	43	EC	3660	4600	4 × 235	% of max. EA (Elem. and Sup.), PA (Sec. and Elem.-Sec.).	E transferred to secondary paid PC.
			EB	4390	6640	10 × 225	3% per teacher, incl. principal if teaching 4 periods daily.	Master's scale: if teaching own subject, or holder of Master of Education degree with completed postgraduate work in subject which he is teaching, or qualified counsellor.
			EA	4840	7290	10 × 245	5 years service incr. for all principals with EA +.	Summer School: $50 per unit to maximum of $300 for teachers below PB. $50 per unit for other certificates provided courses related to subject taught.
			PC B.Ed.	5550	8300	10 × 275		Winter Session: $50 per unit, return for two years.
			PC	5305	7955	10 × 265		Full credit for outside experience to 4 years, then half credit.
			PB	6020	9430	6 × 340, 5 × 274		
			PA	6430	10270	6 × 380, 5 × 312		
			PA Mas.	6760	10660	10 × 350, 1 × 400		
9.	Castlegar (Arbitration Award)	113	EC	3275	3850	4 × 150	Elem.: up to 10 rooms, 7% + 1% per teacher of EA max.	E in secondary: PC less $300 (EC), $200 (EB), $100 (EA).
			EB	4200	6450	10 × 225	Increments $100 in 2nd, 3rd, 4th yrs.	Summer School: $35/unit.
			EA	4600	7100	10 × 250	Over 10 rooms, 13% + 1% per teacher of EA max.	Full credit for Commonwealth experience to 8 years.
			PC B.Ed.	5200	8170	11 × 270	Increments $200 in 2nd, 3rd, 4th yrs.	
			PC	5100	7960	11 × 260	Sec.: 10% + 1% per teacher of PB max.	
			PB	5700	9360	12 × 305	Increments $250 in 2nd, 3rd, 4th yrs.	
			PA	6150	10110	12 × 330	Vice-prin.: ½ of allowance and increments.	
			PA Mas.	6460	10420	12 × 330	Dept. Head: $300 + 2 increments of $100.	
10.	Arrow Lakes	34	EC	3400	4200	4 × 200	Elem.: 3% EB max. per teacher inc. prin.	E over 50% in secondary paid PC.
			EB	4200	6450	10 × 225	Sec.: 3% PA max. (4), 1½% PA max. (over 4) inc. prin.	Summer School: $100 per 3 approved units to maximum of $200.
			EA	4660	7160	10 × 250	Elem.-Sec.: 3% EB max. per elem. teacher + 3% PA max. per sec. teacher.	
			PC	5150	8050	10 × 290		
			PB	5740	9370	11 × 330		
			PA	6200	10160	12 × 330		
11.	Trail (Arbitration Award)	253	EB	4260	6510	10 × 225	Specified amounts, available at BCTF office.	E 50% in secondary $300.
			EA	4700	7150	10 × 245		Master's scale: if teaching own subject, or qualified counsellor.
			PC B.Ed.	5400	8150	10 × 275		
			PC	5150	7800	10 × 265		
			PB	5850	9260	11 × 310		
			PA	6250	10090	12 × 320		
			PA Mas.	6570	10470	12 × 325		
12.	Grand Forks	50	EC	3450			Amounts available at BCTF office.	E in secondary $350.
			EB	4180	6430	10 × 225		Permanent 2nd Class employed as of Dec. 31, 1965, paid $4600.
			EA	4640	7040	10 × 240		Full credit for experience recognized by the Department.
			PC B.Ed.	5330	8050	10 × 272		
			PC	5085	7805	10 × 272		
			PB	5800	9200	10 × 310, 1 × 300		
			PA	6155	9930	11 × 315, 1 × 300		
			PA Mas.	6480	10245	11 × 315, 1 × 300		

13. Kettle Valley	31	EC	3450			Elem.: % of EB max. as below.	E over 50% in secondary, two increments.
		EB	4150	6460	11 × 210	School Size in rooms / 1st yr. / 2nd yr. / 3rd yr.: 2: 4, 5, 6; 3: 5, 6, 7; 4: 7, 9, 11; 5: 9, 11, 13; 6: 11, 13, 15; 7: 15, 17, 19; 8: 16, 20, 24; 9: 18, 22, 26; 10+: 25, 30, 35	Qualification improvement bonus $60/3 units while in employ of board, 5 year limit of payment on one scale.
		EA	4650	7180	11 × 230		Certification improvement credits obtained on leave of absence. $60/3 units payments made at the rate of ⅓ total amount for 3 years.
		PC	5235	8128	11 × 263		Full Commonwealth and U.S. experience.
		PB	5850	9282	11 × 312		Experience as specialist or journeyman recognized up to 3 increments.
		PA	6305	10034	11 × 339	Elem.-Sec.: as above scale + 1%. Sec.: Below 250 pupils: 10% to 20% of PB max. Above 250 pupils: 15% to 25% of PB max. Incrs.: two at 5%. Vice.-prin.: ½.	
14. Southern Okanagan	92	EC	3250	3575	5 × 125	% of PB max. Admin.: per division up to 15: 1.7% Elem. or Superior; 2.05% Elem.-Sec. or Jr. High; 2.35% Jr. Sr., or Sr. Sec. Superv.: ½% per teacher. Extra 2% if SA or over. Vice-prin.: ½. Dept. Head: $300.	E in secondary taking further training, PC scale less $1200 (EC), $700 (EB), $200 (EA). University degree plus teaching certificate allowed 3 or 4 years' experience for years in full time session. Special Class: two increments.
		EB	4000	6255	11 × 205		
		EA	4500	6920	11 × 220		
		PC	5000	7860	11 × 260		
		PB	5600	9065	11 × 315		
		PA	6075	9760	11 × 335		
15. Penticton	173	EC	3250	3875	5 × 125	% of PB max. Elem.: Enrollment / 1st yr. / 2nd yr. / 3rd yr.: 109-222: 7%, 9%, 11%; 223-236: 14, 16, 18; 237-450: 17, 19, 21; 451-550: 20, 22, 23. Elem.-Sec. and Sec.: 16% + ½% per teacher, two incrs. at 3%. Vice-prin.: ½.	Second Class Permanent paid to EB7. E in secondary 50% of time paid 1 category higher. $75 for non-credit courses.
		EB	4000	6255	11 × 205		
		EA	4500	6920	11 × 220		
		PC	5000	7860	11 × 260		
		PB	5600	9065	11 × 315		
		PA	6075	9760	11 × 335		
16. Keremeos	29	EC	3500	4100	5 × 120	% of max. sal. based on certificate held. Elem.: 2 rooms 4%, 3 rms. 6%, 4 rms. 9%, 5 rms. 12%, 6 rms. 15%, 7 rms. 18%, 9 rms. 20%, 9 rms. 22%, 10 rms. 24%. One incr. 2%. Sec.: under 250 pupils 15%; 250-400, 20%; 401-600, 24%; over 600, 29%. Two incrs. of 3% to 5%. Vice-prin.: Sec. ⅛.	EB in secondary $400; EA $500.
		EB	4100	6350	10 × 205, 1 × 200		
		EA	4600	7050	10 × 225, 1 × 200		
		PC	5100	8120	10 × 275, 1 × 270		
		PB	5650	9255	10 × 330, 1 × 305		
		PA	6150	10110	11 × 360		
17. Princeton	33	EC	3600	4050	3 × 150	Elem.-Sec.: $2500. Incrs.: 3 at $400. Vice-prin.: ½.	E over 50% in secondary: $300. Medical plan other than PT-MS. School board pays ½. Summer School: (max. 6 units) $75 per 3 unit course in first year, $100 per 3 units second year, $125 per 3 units thereafter. Non-credit courses and workshops: $6 per day, max. $150.
		EB	4100	6300	10 × 220		
		EA	4600	7020	11 × 220		
		PC	5150	7900	11 × 250		
		PB	5650	8950	11 × 300		
		PA	6100	9800	10 × 335, 1 × 350		

DISTRICT No.	Name	No. of Teachers	Category	Min.	Max.	Increments	Principals' Allowances, Larger Schools	Remarks
18.	Golden	57	EC	4000			Stipulated amounts for various schools. Details available BCTF offices.	E 50% in secondary, taking further training, PC scale less $600 (EC), $400 (EB), $200 (EA). University credit courses — tuition fees. Full credit for Commonwealth and U.S. experience.
			EB	4200	6500	8 × 260, 1 × 220		
			EA	4800	7400	8 × 290, 1 × 280		
			PC	5300	8200	8 × 325, 1 × 300		
			PB	5900	9500	8 × 410, 1 × 320		
			PA	6400	10300	8 × 440, 1 × 380		
19.	Revelstoke	71	EC	3600			% of max. PC (Elem.), PB (Elem.-Sec.), PA (Sec.). Elem.: 8% + $125 (1-10), $100 (11-15), $50 (over 15). Elem.-Sec.: 10% + $125 (1-10), $100 (11-15), $50 (over 15). Sec.: 13% + $150 (1-10), $100 (11-15), $50 (over 15) Incrs.: 3 at $150. Vice-prin.: ⅛. Dept. Head: $400.	Permanent EC $3900. E in secondary PC scale. $90 for 3 units to higher certification. Full credit for all outside experience.
			EB	4000	6300	10 × 230		
			EA	4600	7000	10 × 240		
			PC	5140	8040	10 × 290		
			PB	5700	9200	10 × 350		
			PA	6250	9950	10 × 370		
20.	Salmon Arm	129	EC	3500	4000	5 × 100	Elem.: 10-33% of EA max. Elem.-Sec.: 20% or 25% PA max. Jr. Sec.: 30% PA max. Sr. Sec.: 34% PA max. Vice-prin.: ⅛. Dept. Head: $350.	E in secondary taking futher training, next higher scale. Permanent Second Class paid EB to 7th step. PC, PB or PA in elementary-secondary teaching 50% secondary, one increment. On appointment, full credit for outside experience including U.S., up to 4 years, and half credit beyond. Full credit on permanent appointment.
			EB	4000	6200	11 × 200		
			EA	4500	6920	11 × 220		
			PC	5000	7970	11 × 270		
			PB	5600	9065	11 × 315		
			PA	6100	9950	11 × 350		
21.	Armstrong-Spallumcheen	34	EC	3380	4080	5 × 140	Elem.: $1500; $1000. Sec.: $2000. Vice-prin.: $1000.	Permanent Second Class paid EB to 7th step. $33.33⅓ per unit to max. of $200 to higher cert. Fees or tuition for non-credit course. 3 years' recognition of trades experience.
			EB	4040	6255	8 × 200, 3 × 205		
			EA	4530	6950	11 × 220		
			PC	5020	7820	10 × 235, 2 × 225		
			PB	5520	9000	12 × 290		
			PA	6020	9730	11 × 310, 1 × 300		
22.	Vernon	167	EC	3585			Elem.: 1 room—1 increment; 2 teachers 8% PB max.; next 4—2%; next 5—1½%; balance 1%. Sec.: $\frac{(N + 25)}{2}$ % × PA max. + 10%. N = number of teachers supervised. Vice-prin.: ⅛.	Permanent Second Class paid EB to 7th step. $35 per unit Summer School up to $5665 salary. Lumby Secondary bonus: $750 PB or PA; $625 Home Ec., I.E., PE below PB; others $500. Full credit for Canadian and U.K. experience if holder of permanent B.C. certificate on permanent appointment in the district. Specialists eligible for 3 years' credit for other occupation experience.
			EB	4045	6399	11 × 214		
			EA	4548	7138	11 × 235+		
			PC B.Ed.	5345	8228	11 × 262+		
			PC	5083	7966	11 × 262+		
			PB	5618	9149	11 × 321		
			PA	6185	9892	11 × 337+		
			PA Mas.	6522	10229	11 × 337+		
			1967					
			EC	3800				
			EB	4288	6783	11 × 226+		
			EA	4821	7566	11 × 249 +		
			PC B.Ed.	5665	8721	11 × 277+		
			PC	5388	8445	11 × 277+		
			PB	5955	9698	11 × 340+		
			PA	6556	10486	11 × 357+		
			PA Mas.	6913	10843	11 × 357+		
			Figures rounded to nearest dollar					

23. Kelowna	292	EC	3200	3825	5 × 125	Elem.: % of PC max. Sec.: % of PA max. No. of Teachers — 1- 6: 3% per; 7-12: 2% per; 13-18: 1% per; 19+: ½% per Vice-prin.: ½. Dept. Head: $400.	Full credit for Canadian and Commonwealth experience. E in secondary paid on previous year's PC.
		EB	4000	6255	11 × 205		
		EA	4500	6920	11 × 220		
		PC	5045	7938	11 × 263		
		PB	5600	9142	11 × 322		
		PA	6155	9884	11 × 339		
24. Kamloops	374	EC	3600			% of PA max. Elem.: over 7 teachers 70% of (13% + 1% per teacher). Sec.: 90% of (14% + 1% per teacher). Elem.-Sec.: 100% of (14% + 1% per teacher). Incrs.: 3 at $225. Vice-prin.: ½, 3 incrs. at $175. Dept. Head: Major $500; Minor $300.	Permanent EC with 5 years' experience paid EB plus 5 increments. Summer School $35 per unit above EB. Full credit for Commonwealth experience. Up to $300 in Grade 1 with 3 years' primary experience.
		EB	4000	6300	10 × 230		
		EA	4550	7050	10 × 250		
		PC	5100	8340	12 × 270		
		PB	5650	9265	11 × 300, 1 × 315		
		PA	6150	10115	13 × 305		
25. Barriere	22	EC	3600			Elem.: 2 rooms $300; 3 rooms $400. 4 divisions and more—13% EA max. + 1% per teacher supervised. Sec.: 12% PB max. + 1% per teacher supervised. Three incrs. at $225.	E in secondary PC scale. Permanent Second Class paid EB to 7th step. Summer School: $35 per unit. Full credit for Commonwealth experience. Related experience not recognized by Dept. max. of 3 years' credit.
		EB	4000	6300	10 × 230		
		EA	4550	7050	10 × 250		
		PC	5100	8340	12 × 270		
		PB	5650	9265	11 × 300, 1 × 315		
		PA	6150	10110	10 × 305, 2 × 455		
26. Birch Island (Arbitration Award)	34	EC	3725	4385	3 × 220	% of principal's base salary: 6% elem., 9% sec., plus $125 per teacher. Incrs.: 3 at $225. Vice-prin.: ½, 3 incrs. at $175.	E in secondary, PC scale to 6th step. $60 per unit to higher certification. Full credit for experience in Canada. Continuity of Service Bonus: 2nd year $100, 3rd year $200, 4th year $300.
		EB	4125	6425	10 × 230		
		EA	4675	7175	10 × 250		
		PC	5225	8465	12 × 270		
		PB	5775	9390	11 × 300, 1 × 315		
		PA	6275	10240	13 × 305		
27. Williams Lake	168	EC	3500	4160	4 × 165	Elem.: above 4 teachers $975-$2475 based upon enrollment. Two incrs. to $1375-$2875. Below 5 teachers $325-$775, 2 incrs. at $100. Sec.: $2100-$3500 based upon enrollment. Two incrs. to $2500-$4500.	E in secondary $200. $225 for one-room schools with 4 grades.
		EB	4100	6300	8 × 275		
		EA	4600	7075	9 × 275		
		PC	5150	8340	11 × 290		
		PB	5700	9300	12 × 300		
		PA	6150	10115	13 × 305		
28. Quesnel	142	EC	3200	4100	4 × 225	No. of teachers incl. principal — 1-10: Elem. $170, Sec. $200; 11-20: 100, 100; 20+: 60 Vice-prin.: ½ for three years then 2/3. Dept. Head: $600.	E in sec. $300. $180 per 3 units to higher cert. Full credit for approved Canadian, the Commonwealth and U.S. experience. $10 per month for 6 grades in class.
		EB	4100	6300	8 × 275		
		EA	4600	7075	9 × 275		
		PC	5200	8400	1 × 300, 10 × 290		
		PB	5800	9340	12 × 295		
		PA	6200	10100	13 × 300		
29. Lillooet	48	EC	3650	4050	2 × 200	Admin.: 10% of superv. allowance. Superv.: 1st year $115 (14), $70 (over 14). 2nd year $145 (14), $70 (over 14). 3rd year $170 (14), $70 (over 14). Vice-prin.: ½.	EC in secondary, PC minimum. EB and EA, PC scale to max. for certificate held. Secondary in elementary by own choice, EA scale. $40 per unit above EC to PA. Full credit for outside experience. Special Class: $200. Occupational: $300.
		EB	4050	6450	10 × 240		
		EA	4550	7050	10 × 250		
		PC	5100	8340	12 × 270		
		PB	5650	9265	11 × 300, 1 × 315		
		PA	6150	10115	13 × 305		

DISTRICT No.	Name	No. of Teachers	Category	Min.	Max.	Increments	Principals' Allowances, Larger Schools	Remarks
30.	South Cariboo	72	EC	3550			Elem.: % of EB max. 6% + 2% per teacher.	E in secondary taking further training $300.
			EB	4000	6300	10 × 230	Sec.: % of PB max. 13% + 1% per teacher.	$50 per unit for credits to higher certification.
			EA	4500	6950	10 × 245	Vice-prin.: ½.	
			PC	5050	8170	12 × 260		
			PB	5600	9080	12 × 290		
			PA	6150	10050	13 × 300		
31.	Merritt	75	EC	3500			% of EA max. (Elem.) PB max. (Sec.).	E teachers certificated after 1962 restricted to EB4.
			EB	4000	6300	10 × 230	Elem.: 4% first two rooms, 2% (8), ½% (12).	E in secondary, PC scale to step 9 (EB), step 10 (EA).
			EA	4500	7000	10 × 250	Sec.: 23%.	Full credit for Commonwealth experience.
			PC	5050	8170	12 × 260	Incrs.: Two at 1% to 5% (Elem.), 5% and 7% (Sec.).	
			PB	5550	9250	10 × 310, 2 × 300	Vice-prin.: ½.	
			PA	6150	10000	10 × 340, 2 × 225		
32.	Fraser Canyon	68	EC	3500	3900	2 × 200	% of base salary.	Elementary in Junior Senior High $265.
			EB	4000	6200	10 × 220	Admin.: 5½% Elem., 8½% Sec. and Elem.-Sec.	$30 per unit up to PB.
	(Arbitration Award)		EA	4500	6980	10 × 248	Superv.: 2% (6), 1% (13), ½% (over 19).	
			PC	5000	8025	11 × 275	Vice-prin.: ½.	
			PB	5500	9136	12 × 303		
			PA	6000	9960	12 × 330		
33.	Chilliwack	299	EC	3500	3900	2 × 200	Elem.: % of EB max. 3% (4), 2% (4), 1% (over 9).	E in secondary taking further training PC scale.
			EB	4000	6100	10 × 210	Incrs.: 1 at 3% (up to 9 teachers), 2 at 3% (over 9 teachers).	Special Class: $100 after 1 year's experience, $200 after 2 years' experience.
			EA	4500	6850	10 × 235	Sec.: % of PB max. 2% (6), 1% (12), ¾% (over 18).	Journeyman experience 1 increment for 2 years.
			PC	5000	7915	11 × 265	Incrs.: 2 at 5% of PA maximum.	
			PB	5500	9100	12 × 300	Vice-prin.: ½.	
			PA	6000	9960	12 × 330		
34.	Abbotsford	213	EC	3500	3900	2 × 200	% of scale max. PC (Elem.), PB (Jr. Sec.), PA (Sr. Sec.).	E in secondary taking further training PC to 10th step.
			EB	4000	6100	10 × 210	Admin.: 6% (Elem.), 10% (Jr. Sec.), 10% (Sr. Sec.).	$25 per unit further training, up to $150.
			EA	4500	6850	10 × 235	Superv.: Elem.: 2% (6), 1½% (6), ½% (over 12). Jr. Sec.: 1¼% (8), 1% (16), ½% (over 24). Sr. Sec.: 1½% (8), 1% (16), ½% (over 24).	
			PC	5000	7915	11 × 265	Vice-prin.: ½.	
			PB	5500	9100	12 × 300	Dept. Head: $250.	
			PA	6000	9960	12 × 330		
35.	Langley	203	EC	3500	3900	2 × 200	Elem.: (500-701 pupils) $2060-$2678.	
			EB	4000	6100	10 × 210	Sec.: (to 400 pupils) $1957-$2575.	
			EA	4500	6850	10 × 235	(401-800 pupils) $3090-$3708.	
			PC	5000	7915	11 × 265	(801-1200 pupils) $4223-4841.	
			PB	5500	9100	12 × 300	Vice-prin.: ½.	
			PA	6000	9960	12 × 330	Incrs.: Two between min. and max.	
			PA Mas.	6300	10260	12 × 330	Dept. Head: $300 and $400.	
36.	Surrey	848	EC	3500	4600	4 × 100, 1 × 700	% of max. PC (Elem.), PA (Sec.).	5th step of EC scale limited to permanent Second Class certification on staff January 1, 1962.
			EB	4150	6350	10 × 220	Elem.: 22% (to 300 pupils), 26% (300-500 pupils), 30% (500-650), 33% (650-750), 36% (over 750).	E in secondary paid EA + $235.
			EA	4600	6950	10 × 235	Jr. Sec.: 37% (to 450 pupils) + 2% per 100 pupils over 450 to max. of 37%.	Special Class $200.
			PC	5050	8170	12 × 260	Sr. Sec.: 32% (to 450 pupils) + 2% per 100 pupils over 450 to 850, above 850 pupils—51%.	
			PB	5500	9205	13 × 285	Vice-prin.: ½.	
			PA	5950	10150	14 × 300	Dept. Head: $450.	
			PA Mas.	6150	10350	14 × 300		

37. Delta	204	EB	4175	6375	10 × 220	Elem.: % of PB max., 8% (for first 2 teachers), 2% (for 3rd to 9th teacher), 3% (10th teacher), 1% (11th to 14th teacher), ½% (15th to 20th teacher). Max. allowance 32%. Sec.: % of PA max. 2% for each of first 15 teachers), .8% (for each teacher in excess of 15). Vice-prin.: ½. Dept. Head: $450, Music 5% PB max.	EB certificated after 1962 held to EB4. EC paid EB less $300. E in secondary $300.
		EA	4625	6975	10 × 235		
		PC B.Ed.	5100	8220	12 × 260		
(Arbitration Award)		PC	5100	7960	11 × 260		
		PB	5550	9255	13 × 285		
		PA	6000	10270	14 × 305		
		PA Mas.	6200	10470	14 × 305		
38. Richmond	484	EC	3925			Enrollment / Elem. / Sec. 1- 400 / $1825 / $3000 401- 600 / 2125 / 3300 601- 800 / 2425 / 3600 801-1000 / 2725 / 3900 1001-1200 / / 4200 Incrs.: 2 at $225. Vice-prin.: ½. Dept. Head: $500.	E in secondary paid PC scale.
		EB	4175	6375	10 × 220		
		EA	4625	6975	10 × 235		
(Arbitration Award)		PC	5100	8220	12 × 260		
		PB	5550	9255	13 × 285		
		PA	6000	10270	14 × 305		
		PA Mas.	6200	10470	14 × 305		
39. Vancouver	2678	EC	3410			Stipulated amounts negotiated, but not calculated by any formula. Details available Federation office. Dept. Head: $300 and $600.	Medical Plan—School Board pays up to ½. EB teacher certificated after 1962 restricted to EB4. Elementary and Secondary—PB + 15 acceptable units paid PA.
		EB	4190	6440	10 × 225		
		EA	4640	6990	10 × 235		
(Arbitration Award)		PC B.Ed.	5135	8255	12 × 260		
		PC	5000	8120	12 × 260		
		PB	5600	9370	13 × 290		
		PA	6000	10200	14 × 300		
		PA Mas.	6200	10400	14 × 300		
40. New Westminster	245	EB	4150	6350	10 × 220	Stipulated amounts. Negotiated, but not calculated by any formula. Details available Federation office.	E teachers certificated after 1962 restricted to EB4. Up to $5000 for Detached Duty. PB + 15 units paid PA.
		EA	4600	6950	10 × 235		
		PC B.Ed.	5050	8170	12 × 260		
		PC	5000	8120	12 × 260		
		PB	5500	9205	13 × 285		
		PA	5950	10150	14 × 300		
		PA Mas.	6150	10350	14 × 300		
41. Burnaby	967	EB	4175	6155	9 × 220	Paid PB max. plus % of PB max. Admin.: 8% (Elem. to 12 rms.), 13% Elem., 20% Jr. H., 20% plus $700 Sr. H., $200 for Sr. Matric. Superv.: 3½% per 100 pupils. Less 10% if under PB cert.; plus 5% if 6 years' university. Vice-prin.: Admin.: 40% of Prin's. (Elem.), 70% (Jr. H.), 85% (Sr. H.). Superv.: ½ Elem.; ½ Secondary. Dept. Head: $450 and $600.	Intermediate scales for qualifications beyond the certificate held. Special Class: $150 + 2 annual incrs. of $150. Half credit for trade experience for IE.
		EA	4625	6975	10 × 235		
		PC	5100	8220	12 × 260		
(Arbitration Award)		PB	5550	9255	13 × 285		
		PA	6000	10200	14 × 300		
		PA Mas.	6200	10400	14 × 300		
42. Maple Ridge	203	EC	3500			% of max. PC (Elem.), PA (Sec.). 3% (4), 2% (3), 1½% (3), 1% (16), ½% (over 26). 90% of above allces. during probation. Vice-prin.: ½. Dept. Head: $300.	$50 per 3 units for EC certificated teachers. Maximum $150.
		EB	4000	6100	10 × 210		
		EA	4500	6850	10 × 235		
		PC	5000	7915	11 × 265		
		PB	5500	9100	12 × 300		
		PA	6000	9960	12 × 330		
43. Coquitlam	535	EC	3500			% calculated on PB max. Elem.: 14% first 7 rms., 1.5% each 2 rms. thereafter to 18 rms. Three incrs. of 1.9% to 9 rms., 2.5% over 9 rms. Jr. Sec.: 25% under 500 pupils, 26% over 500 pupils. Four incrs. of 2.5%. Jr.-Sr. Sec.: 31% for smaller schls., 43.5% for largest sch. $200 for Sr. Matric. Four incr. of 3.1%. Sec. prins. paid PA max. Vice-prin.: ½. Dept. Head: $500.	$75 per 3 units to teachers of slow learner classes. IE.: 1 incr. per year of apprenticeship or equivalent, maximum of 5 increments. Shared cost of Sick Leave Bank.
		EB	4100	6300	10 × 220		
		EA	4600	6950	10 × 235		
		PC B.Ed.	5100	8112	12 × 251		
		PC	5050	8062	12 × 251		
		PB	5600	9240	13 × 280		
		PA	6100	10143	13 × 311		

DISTRICT No.	Name	No. of Teachers	Category	Min.	Max.	Increments	Principals' Allowances, Larger Schools	Remarks
44.	North Vancouver (Arbitration Award for 1966)	712	EB	4150	6350	10 × 220	% of PA (Mas.) max. Enrollment Elem. Jr. Sec. Sr. Sec. - 400 17% 32% 39% 401-.600 20 32 39 601- 800 23 32 39 801-1200 26 35 42 Incrs.: Two at 4%. Vice-prin.: ½ Elem., ⅗ Sec. Dept. Head: $500.	E in secondary paid PC. EC 2nd class 8th year EB. EC 3rd class 4th step EB. EC paid EB minimum. Summer School for E certification: 1966 $100, 1967 $150, per 3 units (with 2nd class). PB + 15 units paid PA. Special Class: $250. Half credit for experience in U.S.A. Credit for trades experience.
			EA	4600	6950	10 × 235		
			PC	5050	8170	12 × 260		
			PB	5500	9205	13 × 285		
			PA	5950	10150	14 × 300		
			PA Mas.	6150	10350	14 × 300		
			1967					
			EB	4450	6800	10 × 235		
			EA	4920	7420	10 × 250		
			PC	5440	8740	10 × 275		
			PB	5950	9980	13 × 310		
			PA	6350	10830	14 × 320		
			PA Mas.	6550	11030	14 × 320		
45.	West Vancouver	293	EB	4150	6350	10 × 220	% of PA (Mas.) max. Elem.: 18% (250 pupils) + 3% (each add. 100 pupils to 650). Sec.: 37% (to 400 pupils) + 4% (each add. 400 pupils). Incrs.: Two at 2% (Elem.), 3% (Sec.). Vice-prin.: 55% (Elem.), 60% (Sec.) of allce. and incrs. Dept. Head: Major $792, Minor $627.	EA teachers certificated after 1932 restricted to EA7. E + 20 years' experience aged 55 years or over receive $200 above maximum. PB + 20 years' experience aged 55 years or over receive $250 above maximum. EB + 9 units EA scale (for 2 years). EA + 9 units PC scale (for 2 years). PC + 9 units PB scale (for 2 years). PB + 12 units towards Master's, PA scale (for 2 years). SA/PA + 12 units towards Master's, PA Mas. scale (for 2 years).
			EA	4600	7130	11 × 230		
			PC	5050	8185	11 × 285		
			PB	5500	9205	13 × 285		
			PA	5950	10150	14 × 300		
			PA Mas.	6150	10350	14 × 300		
46.	Sechelt	81	EC	3200			Elem.: $175 per tchr. (9), $50 per tchr. (over 9). Sec.: $225 per tchr. (9), $50 per tchr. (over 9). Prin. incld. in staff total. Incrs.: 3 annual at $100 each. Plus 7% for 1966, 7% for 1967.	E over 50% in secondary taking further training, PC scale. Credit courses, approved by Board, tuition fees paid. Non-credit courses: fees in summer; $10 per day and expenses for transportation at other times. Up to $5000 per year for teachers on leave of absence for study. Special Class 50% or more, $100. Full credit for Canadian, the Commonwealth and U.S. experience.
			EB	4200	6450	10 × 225		
			EA	4675	7175	10 × 250		
			PC	5150	8150	10 × 300		
			PB	5625	9125	10 × 350		
			PA	6100	9950	11 × 350		
			PA Mas.	6300	10150	11 × 350		
			1967					
			EC	3400				
			EB	4450	6950	10 × 250		
			EA	4950	7700	10 × 275		
			PC	5450	8700	10 × 325		
			PB	5950	9700	10 × 375		
			PA	6350	10475	11 × 375		
			PA Mas.	6550	10675	11 × 375		
47.	Powell River	161	EC	3600	4340	4 × 185	% of PA median. Elem.: 3% (2), 2% (4), 1% (over 6 tchrs.). Sec.: Specific percentages for each schl. Details avail. Federation office. Incrs.: Three at $200 (half credit for Canadian exp. outside the district). Vice-prin.: 60% allce., full incrs. Dept. Head: 5% PA median.	E in secondary $200. Summer School: $50 per unit. Up to $5000 per year for teachers on Detached Duty. Special Class: $300; $200 for Grade 1 with 2 years' experience. PB + 15 units, one extra increment. Full credit for Commonwealth and U.S. experience.
			EB	4300	6600	10 × 230		
			EA	4750	7350	10 × 260		
			PC	5350	8300	10 × 295		
			PB	5950	9350	10 × 340		
			PA	6250	10000	10 × 375		
			PA Mas.	6500	10350	10 × 385		

48. Howe Sound	79	EC	3500		9 × 250	% of PC B. Ed. (Elem.), PA (Sec.) 2.5% (5), 1.7% (5), 1.4% (over 10). Incr.: 1 incr. for each tchr. above 2 up to 5 tchrs. $150/incr. Dept. Head: 1st $550, 2nd $400.	E 50% in secondary taking further training $200. Summer School: $50 per unit to maximum of $300. Detached Duty: 2/3 pay to a max. of $5,000. Bonus: Rural $250-$750, Primary $200, Special Class $200. Full credit for Canadian and Commonwealth public school experience and for some private schools.
		EB	4250	6500	10 × 260		
		EA	4700	7300	10 × 290		
		PC B.Ed.	5400	8300	10 × 285		
		PC	5150	8000	10 × 340		
		PB	5800	9200	10 × 380		
		PA	6200	10000	10 × 390		
		PA Mas.	6400	10300			
49. Ocean Falls	53	EC	3800	4500	4 × 175	1¼% of PA max. per teacher. Incr. of 7% of principal's allowance after two years. Vice-prin.: ⅛ admin. and superv. Incr. of 7% vice-prin. allce. after two years.	E in secondary $400. $50 per 3 units above permanent to higher certificate. Summer School: $205 to $310. Winter Session: Maximum of $625. Full credit for approved Commonwealth experience.
		EB	4350	6750	8 × 300		
		EA	4950	7650	9 × 300		
		PC	5550	8550	10 × 300		
		PB	6150	9450	11 × 300		
		PA	6750	10350	12 × 300		
50. Queen Charlotte	25	EC	3350	4150	4 × 200	10% of max. for cert. held plus 2% per teacher. Vice-prin.: ½.	E in secondary $300. Summer School: $50 per unit. Travel Allowance: $100 to $125. Service bonus 4% based on certificate and experience, paid 2nd, 3rd, 4th years in district.
		EB	4500	6340	8 × 230		
		EA	5050	7345	9 × 255		
		PC	5600	8350	10 × 275		
		PB	6150	9670	11 × 320		
		PA	6700	10550	11 × 350		
51. Portland Canal	5	EC	3800	4380	4 × 170	1 tchr. $200; 2 tchrs. $300; 3 tchrs. $400; 4 tchrs. or more 10% of his max. + 2% per tchr.	Summer School: $50 per unit. Moving allowance: one-way fare up to $400. Continuous Service Grant: $100 after one year + $50 each year to six.
		EB	4400	6240	8 × 230		
		EA	5000	7250	9 × 250		
		PC	5550	8300	10 × 275		
		PB	6100	9400	11 × 300		
		PA	6650	10550	12 × 325		
52. Prince Rupert	120	EC	3500	4180	4 × 170	% of $4800 (El.), $6450 (Sec.) 5% (10), 1% (over 10). 1-4 rm. schools $100/rm. elem. $200/rm. sec. Dept. Head: $300.	E in secondary taking further training $300. Summer School: $50 per unit to $300. Commonwealth-trained: full credit for Commonwealth experience, others: full credit to 5 years. Moving allowance: one-way fare up to $400.
		EB	4200	6040	8 × 230		
		EA	4800	7050	9 × 250		
		PC B.Ed.	5350	8375	11 × 275		
		PC	5350	8100	10 × 275		
		PB	5900	9200	11 × 300		
		PA	6450	10350	12 × 325		
		PA Mas.	6450	10675	13 × 325		
53. Terrace	121	EC	3500	4180	4 × 170	Elem.: $150 plus $150 (7), $100 (3), $50 (10), $25 (over 20). Sec.: $250 plus $150 (3), $200 (3), $100 (9), $50 (5), $50 (over 20). Incrs.: Three at $150 (small elem.), $175 (large elem.), $175 (small sec.), $200 (large sec.). Vice-prin.: ½ of allce., ½ of service incrs. Dept. Head: Elem. $200, Sec. $300.	E in secondary taking further training $300. Summer School: $50 per unit to $300. 100% credit for Commonwealth experience for permanent staff, 50% outside. Moving allowance: single $50 maximum, married $300 maximum.
		EB	4200	6300	10 × 210		
		EA	[illegible]	7060	5 × 300, 4 × 190		
		PC	5350	8150	5 × 330, 6 × 220		
		PB	5900	9225	5 × 365, 6 × 250		
		PA	6450	10370	5 × 385, 7 × 285		
54. Smithers	61	E[illegible]	[illegible]00	4100	4 × 225	Elem.: $190 (10), $110 (over 10). Elem.-Sec. and Sec.: $250 (10), $110 (over 10). Vice-prin.: ½.	EC in sec. $300, EB $400, EA $500. $50 per unit for E cert., $50 per 3 units for P cert. for perm. staff. 6 units per year max. Full Commonwealth exp., half U.S.A. experience.
		[illegible]	[illegible]9	6300	8 × 275		
		[illegible]	[illegible]0	7075	9 × 275		
		[illegible]	[illegible]	8420	11 × 295		
		[illegible]	[illegible]5	9375	12 × 300		
		P[illegible]	00	10100	13 × 300		

DISTRICT No.	Name	No. of Teachers	Category	Min.	Max.	Increments	Principals' Allowances, Larger Schools	Remarks
55.	Burns Lake	54	EC	3200	4100	4 × 225	Elem.: $170 (10), $115 (over 10).	E 50% in secondary $500 up to PC.
			EB	4100	6300	8 × 275	Elem.: Jr. Sec.: $210 (10).	$50 per unit up to PA for approved courses.
			EA	4600	7075	9 × 275	Sec.: $230 (10), $110 (over 10).	Trade experience to a maximum of 6 years. First 2 years not counted.
			PC	5175	8420	11 × 295	Supervising prin.: $90 per tchr. for tchrs. in other schls.	Full credit Commonwealth, one-half U.S.A. experience on permanant appointment.
			PB	5775	9375	12 × 300	Vice-prin.: ½.	
			PA	6200	10100	13 × 300		
56.	Vanderhoof	71	EC	3600			Elem.: $180 (10), $105 (over 10).	E 60% in secondary $400.
			EB	4100	6300	8 × 275	Elem. Jr. Sec.: $215 (10), $105 (over 10).	Professional Improvement: $50 per unit, non-credit expenses $50 per first week, $25 after.
			EA	4300	7075	9 × 275	Sec.: $240 (10), $105 (over 10).	Full Commonwealth experience, one-half U.S.A., with permanent B.C. certificate.
			PC	5175	8420	11 × 295	Supervising prin.: $65 per tchr. not in his schl.	
			PB	5775	9375	12 × 300	Vice-prin.: ½.	
			PA	6200	10100	13 × 300		
57.	Prince George	388	EC	3600 Int.	4100 Perm.		Sec.: Admin.: Sr. 13%, Jr. 10.5% of basic sal.	Summer Session: $50 per approved unit.
			EB	4100	6300	8 × 275	Superv.: $150 (10), $100 (10), $50 (over 20).	Full Commonwealth and U.S.A. experience after 3 years' district service.
			EA	4600	7075	9 × 275	Elem. Jr.: as above.	IE with journeyman papers start at a minimum of PC minimum.
			PC B.Ed.	5275	8520	11 × 295	Elem.: Admin.: 8% basic scale.	
			PC	5175	8420	11 × 295	Superv.: $125 (10), $75 (10), $50 (over 20).	
			PB	5775	9375	12 × 300	Dept. Head: Major $630, Minor $420.	
			PA	6150	10110	12 × 330		
			PA Mas.	6300	10260	12 × 330		
58.	McBride	37	EB	4150	6350	8 × 275	Admin. Allce. per tchr., including prin., $180 (Elem.), $200 (Elem. Jr. Sec.), $220 (Sec.).	E in secondary paid PC to maximum of 5th step.
			EA	4650	7125	9 × 275	Incrs.: Three at $225.	$50 per unit up to PA.
			PC	5225	8470	11 × 295		Winter session bonus at rate $50/first 6, $25/remainder.
			PB	5825	9425	12 × 300		Full credit for Canadian, the Commonwealth and U.S.A. experience.
			PA	6250	10150	13 × 300		Consecutive service: $100 per year for 3 years for permanent staff excluding principals.
59.	Peace River South	212	EC	4000			Under 10 divisions: specified amount from $335 to $1400.	Permanent EC paid EB 2.
			EB	4150	6250	4 × 260, 5 × 212	1-3 increments at $150.	Summer session $50 per unit.
			EA	4650	7150	5 × 270, 5 × 230		
			PC B.Ed.	5200	8575	5 × 290, 7 × 275		
			PC	5200	8300	5 × 290, 6 × 275		
			PB	5750	9350	6 × 320, 6 × 280		
			PA	6300	10050	6 × 325, 6 × 300		

Enrollment	Sr. Sec. % of PA max. + 315	Jr. Sec. % of PA Max.	Sr. Elem. % of PB Max.	Sco. Elem. % of PC Max.
below 425	30	25	25	20
425-532	35	30	30	25
533-640	38	33	33	28
641-748	40	35	35	30
above 749	42	37	37	32

3 increments of $200
Vice-prin.: ⅓
Incr.: 3 at $150
Dept. Head: $350
Incr.: 8 at $50

60. Peace River North	147	EC	3500	4300	4 × 200	Admin.: 5% of prin. base sal. (Elem.), 10% (Sec.). Superv.: $150 (10), $100 (over 10). Incrs.: 3 at $100 starting 3rd year. Vice-prin.: ½, incr. 5 at $50. Dept. Head: 5% basic salary.	E in secondary $200. Summer Session: $50 per unit. Full credit for public school teaching experience in Commonwealth and U.S.A. Half credit for trades experience to 4 years.
		EB	4250	6500	9 × 250		
		EA	4750	7300	10 × 255		
		PC	5350	8540	11 × 290		
		PB	5900	9365	11 × 315		
		PA	6400	10360	12 × 330		
61. Greater Victoria (Arbitration Award)	1023	EC	3325	4105	4 × 195	% of PA max. (% of PB max. if cert. is below PB). **Teacher Entitlement** / **Elem.** / **Jr. Sec.** / **Sr. Sec.** 1-25 / 15-22% / 27% / 33% 26-30 / 23 / 29 / 35 31-35 / 24 / 31 / 37 36-40 / 33 / 39 41-45 / 35 / 41 46-50 / 37 / 43 51 and over / 39 / 45 56 and over / 47 Incr.: 3 after scale max. Vice-prin.: ½ allces., ½ incrs. Dept. Head: **Enrollment** / **Group 1** / **Group 2** 400-799 / 5% PB or PA max. above 800 / 6% / 5%	E teachers certificated after 1963 restricted to EC0, EB4, EA7. Special Class: $150. IE and Vocat.: ½ credit for journeyman experience to 10 years.
		EB	4000	6300	10 × 230		
		EA	4500	6900	10 × 240		
		PC	5000	8060	12 × 255		
		PB	5500	9205	13 × 285		
		PA	6000	10130	14 × 295		
62. Sooke (Arbitration Award)	142	EC	3235	4105	4 × 195	**Elem.** / **Sec.** First 4 teachers / $800 / $1000 Next 5, each / 80 / 100 Over 9, each / 50 / 70 Incrs.: Three annual incrs. after perm. appt. Vice-prin.: ½ allces., ½ incrs. after two yrs.	Beginning teachers limited to EC0, EB4, EA7. E in secondary taking further training next higher scale. $75 per 3 units above EB. IE: ½ credit for journeyman experience up to 10 years.
		EB	4000	6350	10 × 235		
		EA	4500	6950	10 × 245		
		PC	5000	8060	12 × 255		
		PB	5550	9190	13 × 280		
		PA	6000	10130	14 × 295		
63. Saanich	147	EC	3400	3645	1 × 245	Elem.: 12% PC max. + 1% for every 35 pupils. Sec.: 12% PA min. + 1% of PA max. for every 30 pupils. Incrs.: Elem.: 3 in alt. yrs. at $150 (3-5 rms.), $200 (6-8), $250 (over 8). Sec.: 3 in alt. yrs., 2 × $300, 1 × $350. Dept. Head: $350.	EB or EA in secondary: one increment above scale.
		EB	3950	6400	10 × 245		
		EA	4450	6900	10 × 245		
		PC	4950	8010	12 × 255		
		PB	5500	9205	13 × 285		
		PA	6000	9990	14 × 285		
64. Gulf Islands	27	EC	3390	4170	4 × 195	Specified amounts, available at BCTF office.	E in secondary taking further training PC scale. After 1 year, ½ raise to next higher certificate per 6 units. $25 per unit to SA/PA of approved courses. Educational leave after 3 years, up to 2/3 salary, return for 3 years. EB with 20 years and over 55 years old, $200.
		EB	4065	6365	10 × 230		
		EA	4565	6965	10 × 240		
		PC	5065	8125	12 × 255		
		PB	5565	9270	13 × 285		
		PA	6065	10195	14 × 295		
65. Cowichan (Arbitration Award)	189	EC	3340	4124	4 × 196	% of PA max. Admin.: Sec.: 15% for 8 or more tchrs. Elem.: 7% for 8 or more tchrs. Superv.: 1% for each of (8), ½% (over 8). Incrs.: 5 at 2%. Vice-prin.: ½. Dept. Head: $325.	E in secondary taking further training, next higher scale. PB + 15 units: $300. Special Class: $300. Sick Leave Bank.
		EB	4030	6360	10 × 233		
		EA	4450	6950	10 × 250		
		PC	4980	8100	12 × 260		
		PB	5567	9285	13 × 286		
		PA	5990	10190	14 × 300		
		PA Mas.	6190	10390	14 × 300		

66. Lake Cowichan (Arbitration Award)	67	EC EB EA PC PB PA	3490 4180 4600 5180 5767 6190	4274 6510 7100 8300 9485 10390	4 X 196 10 X 233 10 X 250 12 X 260 13 X 286 14 X 500	Schools above 5 teachers: % of max. salary, EA (Elem.), PA (Sec.). 11% plus 1% per tchr. Incrs.: 5 at 1%. Vice-prin.: ½.	E teachers certificated after 1962 restricted to EC0, EB4, EA7. E in secondary, 2 increments above scale. $90 per three units after perm. certification. Payment limited to three years EB, EA; five years PC, PB. Educational leave after 3 years, up to 2/3 salary, return for 3 years. Outside experience equal to Dept. recognized credit plus one year for each year in the district to scale max.
67. Ladysmith (Arbitration Award)	92	EC EB EA PC B.Ed. PC PB PA PA Mas.	3500 4000 4500 5250 5050 5550 6050 6250	6350 6950 8165 7965 9090 9770 9970	10 X 235 10 X 245 11 X 265 11 X 265 12 X 295 12 X 310 12 X 310	Elem.: % of PC max. Admin.: 16% (3-4 tchrs.), 18% (5-7), 20% (over 8). Superv.: 1% per tchr. supervised. Sec.: 25% PA max. plus ½% per tchr. supervised. Vice-prin.: ½. Dept. Head: $300 + 2 incrs. at $100.	E in secondary: PC less $300 (EC), $200 (EB), $100 (EA). Permanent Second Class paid EB to 7th step. $110 per 3 units towards next certification. $150 per 3 units for non-credit courses. PB + 15: $200. Special Class: $250. Occupational Class: $300. Split-grades: $200.
68. Nanaimo	303	EC EB EA PC PB PA PA Mas.	3340 4030 4450 4980 5567 5990 6190	4124 6360 6950 8100 9285 10190 10390	4 X 196 10 X 233 10 X 250 12 X 260 13 X 286 14 X 300 14 X 300	% of PA max. Admin.: 15% (Sec.), 7% (Elem. over 8 rms.). Superv.: 1% (8), ½% (over 8). Incrs.: 5 annual at 2%. Vice-prin.: ½. Dept. Head: $325.	Tuition fees and workshop fees. PB + 15: $300. Special Class: $300. Sick Leave Bank.
69. Qualicum (Arbitration Award)	61	EC EB EA PC PB PA	3400 4000 4500 5000 5500 6000	4100 6350 6950 8120 9140 9900	4 X 175 10 X 235 10 X 245 12 X 260 13 X 280 13 X 300	Admin.: $325 (El.), $850 (Jr. Sec.), $975 (Sr. Sec.) Superv.: El.: $100 per teacher, Sec.: $125 (8), $75 (over 8). Incrs.: 4 at $150. Vice-prin.: ½ admin. and superv.	E in sec., $300. $40 per unit advanced study.
70. Alberni (Arbitration Award)	243	EC EB EA PC PB PA	3450 4050 4550 5050 5550 6050	4050 6350 7000 8020 9090 9770	3 X 200 10 X 230 10 X 245 11 X 270 12 X 295 12 X 310	% of max. sal., EA or prin's. scale, whichever higher (El.), PA (Sec.). Elem.: 4-9 tchrs. 12%; over 9, 18%; plus 1% per tchr. Jr. H.: 1-5 tchrs., 20%; over 5, 25%; plus ½% per tchr. Sr. H.: 30% plus ½% per tchr. Vice-prin.: approx. 50% (Elem.); approx. 55% (Sec.). Dept. Head: 5% PA max.	E in secondary taking further training, next higher scale. Full credit for Commonwealth experience for permanent staff with permanent certificate. All teachers paid $100 above printed scale.
71. Courtenay	200	EC EB EA PC PB PA	3400 4000 4500 5000 5550 6000	4100 6300 6900 7860 9090 9900	4 X 175 10 X 230 10 X 240 11 X 260 12 X 295 13 X 300	% of PA max. (Sr. Sec.), PB others. Superv.: 3% (3), 2% (4), 1% (5), ½% (over 12). Admin.: Elem.: 20% of superv.; Sec.: 45% of superv. Vice-prin.: ½. Dept. Head: $350.	E teachers certificated after 1362 restricted to EC0, EB4, EA7. E 50% of time in secondary, scale position + $300. $35 per unit for each of first 12 units to higher certificate.

DISTRICT No.	Name	No. of Teachers	Category	Min.	Max.	Increments	Principals' Allowances, Larger Schools	Remarks
72.	Campbell River	151	EC	3610	4321	3 × 237	% of $10000. Admin.: 7% (Elem.), 11% (Jr. Sec.), 15% (Sr. Sec.). Superv.: 1% (15), ½% (over 15). Incrs.: 3 at $200 (Elem.), $250 (Sec.). Vice-prin.: ½ Elem., 6/10 Sec. Dept. Head: $300 and $400.	E in secondary taking further training $200. Professional Improvement Summer or Winter: $100 + $50 per unit. Detached Duty: Up to $12000 total, 6 years in district return for 2 years. Full credit for Commonwealth and U.S.A. experience. Half credit for up to 10 years trade or industrial experience.
			EB	4043	6473	10 × 243		
			EA	4535	7085	10 × 255		
			PC	5083	8075	11 × 272		
			PB	5690	9230	12 × 295		
			PA	6354	10566	13 × 324		
75.	Mission	110	EC	3500	3900	2 × 200	Elem.: Admin.: 5% of basic salary. Superv.: % of PC max. 2% (6), 1% (6), ½% (over 12). Sec.: % of PA max. 3% (4), 2% (3), 1½% (3), 1% (10), ½% (over 20), 90% of above allce. paid first year, 95% second year, 100% succeeding years. Vice-prin.: ⅓. Dept. Head: $300.	$100 per 3 units for E teachers with seven or under years' experience. The 6 units prior to higher certification are excepted.
			EB	4000	6100	10 × 210		
			EA	4500	6850	10 × 235		
			PC	5000	7915	11 × 265		
			PB	5500	9100	12 × 300		
			PA	6000	9960	12 × 330		
76.	Agassiz	38	EC	3500	3900	2 × 200	$218 (8), $109 (over 8, prin. excld.). Vice-prin.: ½.	EB or EA in secondary taking further training paid PC. Those ineligible for EB permanent paid EB to 5th step. $40 per unit advanced study.
			EB	4000	6100	10 × 210		
	(Arbitration Award)		EA	4500	6850	10 × 235		
			PC	5000	7915	11 × 265		
			PB	5600	9200	12 × 300		
			PA	6100	10060	12 × 330		
			PA Mas.	6300	10260	12 × 330		
77.	Summerland	49	EC	3500			Specified amounts, available at BCTF office.	E in secondary next higher scale to maximum for certificate held. Permanent Second Class paid EB to 7th step.
			EB	4030	6230	11 × 200		
			EA	4510	6930	11 × 220		
			PC	5045	7850	11 × 255		
			PB	5660	9070	11 × 310		
			PA	6180	9755	11 × 325		
78.	Enderby	35	EC	3500			Elem.-Sec.: (combined 401-600 pupils), 25% PB max., 2 incrs. of 5% PB max. Vice-prin.: Elem.: 12½% - 17½% of EA max. Sec.: 12½% - 17½% PB max.	E in secondary next higher scale to one increment under maximum. Permanent Second Class paid EB to 7th step. $25 per unit to higher certificate above EB, marks over 60%. Full credit for Canadian experience.
			EB	4000	6150	10 × 215		
			EA	4500	7000	10 × 250		
			PC	5050	7970	10 × 265, 1 × 270		
			PB	5650	9060	11 × 310		
			PA	6100	9840	11 × 340		
79.	Ucluelet-Tofino	24	EC	3400	4200	4 × 200	Elem.: $180 per teacher (incl. prin.). Sec.: $250 per teacher (incl. prin.).	Permanent second class paid EB to 5th step. Summer School $100 per 3 units. IE half credit for trade exp. to 5 years.
			EB	4360	6860	10 × 250		
			EA	4900	7500	10 × 260		
			PC	5430	8455	11 × 275		
			PB	5960	9500	12 × 295		
			PA	6390	10230	12 × 320		
80.	Kitimat	100	EC	3625	4345	4 × 180	% of PA max. Elem.: 13% (up to 10 rms.), 18% (10-18 rms), 23% (19 and over). Sec.: 33%. Incrs.: 3 at 2.75%. Vice-prin.: Elem. ½; Sec. 6/11. Dept. Head: 4% - 8.14% in three incrs.	Summer School: $50 per approved unit. Full credit for outside experience. Moving allowance and rental assistance under certain conditions. Special Class: $300.
			EB	4360	6280	4 × 275, 4 × 205		
			EA	4890	7365	5 × 315, 4 × 225		
			PC	5420	8345	5 × 330, 5 × 255		
			PB	5950	9545	5 × 365, 6 × 295		
			PA	6480	10550	5 × 380, 7 × 310		

81. Fort Nelson	24	EC	3500	4300	4 × 200	Elem.: (6 rms.) $1000. Elem.-Sec.: $1700. Incrs.: 2 at $100.	E in secondary full time $400. Summer Session: $150 + $50 per unit. Full credit for outside experience. Northern allowance of $550 to $660. Travel allowance: $100 on appointment.
		EB	4250	6500	9 × 250		
		EA	4750	7300	10 × 255		
		PC	5350	8540	11 × 290		
		PB	5900	9365	11 × 315		
		PA	6400	10360	12 × 330		
82. Chilcotin	11	EC EB EA PC PB PA	As Williams Lake S.D. No. 27				
83. Portage Mountain	17	EC	3700	4525 (4)	200↙225↘175	Elem.-Sec.: $800 admin. plus $150 per tchr. (10); $100 per tchr. (over 10). Incrs.: 2 at $100. Vice-prin.: approx. ½.	Permanent Second Class paid EB6. Summer Session: $50 per unit. Moving and travel allowance. Teacherages at low rentals.
		EB	4400	6400 (10)	100↙300↘100		
		EA	5000	7525 (10)	200↙375↘150		
		PC	5500	8675 (11)	200↙450↘175		
		PB	6000	9475 (11)	200↙450↘225		
		PA	6500	10600 (12)	275↙500↘225		
		1967					
		EC	3885	4750 (4)	210↙235↘185		
		EB	4665	6785 (10)	105↙320↘105		
		EA	5300	7975 (10)	210↙400↘155		
		PC	5830	9195 (11)	210↙480↘185		
		PB	6360	10045 (11)	210↙475↘240		
		PA	6890	11235 (12)	290↙530↘235		
84. Vancouver Island West (Arbitration Award)	17	EC	4600	5650	3 × 330	Admin.: $450. Superv.: Elem.: $200 (8), $150 (over 8). Sec.: $225 (8), $175 (over 8).	E in secondary PC scale. $75 per unit to higher certificate. Full credit for public school experience in Commonwealth and U.S.A.
		EB	4600	7750	9 × 350		
		EA	4945	8095	9 × 350		
		PC	5600	9250	10 × 365		
		PB	5950	9950	10 × 400		
		PA	6500	10500	10 × 400		
85. Vancouver Island North	82	EC	3920	4565	3 × 215	% of max. EB (Elem.), PB (Elem.-Sec.). 7% (1), 3% (1), 2% (8), 1% (each teacher over 10). Incrs.: 10% of allce. after two years. Vice-prin.: ½.	E in secondary 75% of time, next higher scale. Pro rata increase if less than 75%. Summer School and Correspondence: $60 per unit to higher certificate. Full credit for Commonwealth experience.
		EB	4560	6760	6 × 300, 2 × 200		
		EA	5090	7690	8 × 300, 1 × 200		
		PC	5620	8770	10 × 315		
		PB	6150	9615	11 × 315		
		PA	6680	10400	12 × 310		
86. Creston-Kaslo	112	EC	3400	4200	5 × 160	Elem.: above 4 tchrs. $700-$2200 based upon enrollment. Three incrs.: $1000-$2700. Sec.: $1500-$3200 based upon enrollment. Three incrs. for large schl. (over 600 pupils) to $3700. Plus supplementary allce. of $1 per pupil. Vice-prin.: ½. Dept. Head: Major $500; Minor $300.	Permanent Second Class paid EB. Summer School or Winter Session: $50 per unit to higher certificate for EC, EB, EA. PB + 15 acceptable units paid PA for 3 years. Full credit for Commonwealth experience on permanent appointment.
		EB	4220	6520	10 × 230		
		EA	4750	7150	10 × 240		
		PC B.Ed.	5380	8080	10 × 270		
		PC	5200	7750	10 × 255		
		PB	6000	9400	10 × 340		
		PA	6360	10060	10 × 370		
University Hill	25	EB	4150	6350	10 × 220	Principals' allowances under negotiation. Dept. Head: $400 + 3 incrs. at $100.	For teachers certificated after 1962, EB cut off at 4th step, EA at 7th. Last PC increment for B.Ed. only. PB + 15 approved units paid PA.
		EA	4600	6900	10 × 230		
		PC	5020	8200	12 × 265		
		PB	5470	9250	12 × 315		
		PA	6000	10200	12 × 350		
		PA Mas.	6210	10410	12 × 350		

270 - 10% - 15% = 270 - 27 - 36.45 = 206.55

A TEACHER'S CREDO

It has been truly said that tact and an inherent sense of decency give ease and poise to everyone who may possess such qualities and far transcend the benefits that any amount of learning can ever give.

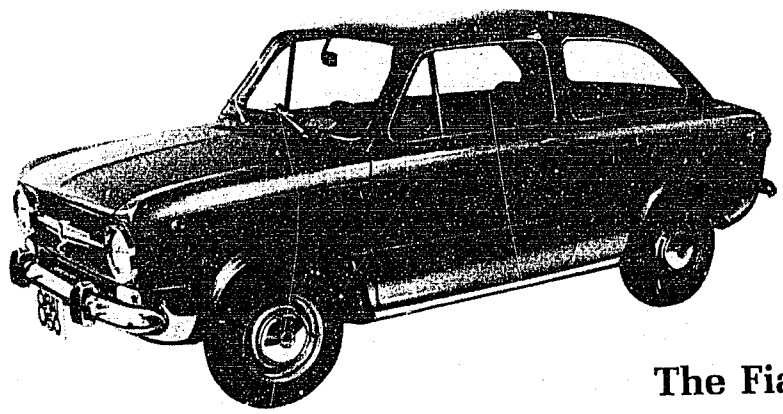
This marching age and restless world demand of us all the practical help we can give in a cheerful, optimistic, exemplary way to inspire by personal example in contact with juvenile mind and adult mind alike.

An intuitive perception of what is fit, proper and right, quick mental discernment shown in saying or doing the proper thing, achieves its reward in respect, attachment, goodwill and esteem.

270 - 15% = 270 - 40.50 = 229.50
Woodward Greiner Company Limited,
2070 Crescent Street,
Montreal, Quebec.

(duplicate)

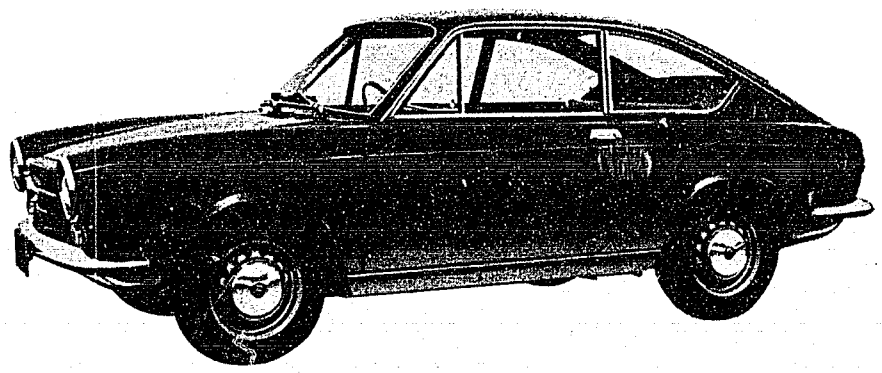
Two very good reasons for buying a new FIAT 850



1.

Economical, comfortable, attractive, extremely reliable transportation for four people. Tested for nearly a million miles in the coldest and the hottest climates of the world. Probably the most ideal small car yet made for Canadian conditions.

The Fiat 850 Sedan. Price $1,745*



2.

For those who appreciate the grace and pace of a fine European gran turismo car, here is one, at last, that is sensibly priced. The Fiat Coupé gives incredible value for money, beautiful fastback styling, superb handling, disc brakes, high performance, exciting sports interior.

The Fiat 850 Coupé. Price $2,145*

*Suggested Retail Price, Western Port of Entry. Provincial Sales Tax extra.

A third reason: FIAT, the world's fifth largest car producer, guarantees you FIRST CLASS SERVICE.

FIAT

FIAT MOTORS OF CANADA LIMITED
58 Northline Road, Toronto 16, Ont. Tel: 755-2238
Vancouver, B.C. Tel. 684-8952

7888

BUY A FIAT NOW—WIN A TRIP TO ITALY FOR TWO VIA ALITALIA AIRLINES. SEE YOUR FIAT DEALER FOR CONTEST RULES.
Winner will be required to answer a qualifying question.

Like Ripples in a Pool

Continued from page 262

currently attending the University of Ottawa. Dick Hibberd is a Canadian who teaches at Max Cameron Secondary School in Powell River, B.C. The two teachers met and became friends in the summer of 1964 when Hibberd took part in Project Africa. This is a program conducted each summer by the Canadian Teachers' Federation which sends top-flight Canadian teachers to Africa where they assist with courses designed to help African teachers upgrade their qualifications. Mattenje was one of the African educators who worked side-by-side with the Canadians on these courses. Together they worked to help teacher-colleagues. And they discovered something that Canadians and Africans discover each year in Project Africa —teachers on both continents have similar problems and similar hopes; each had something to contribute to the education and understanding of the other.

Like all the Canadians who participate in Project Africa, Dick Hibberd continued to participate long after he returned to his own classroom. He corresponded with other Canadian teachers who were about to leave Canada, either with another Canadian Teachers' Federation Project Africa team or under the auspices of the External Aid Office. He gave talks and showed slides to various groups and organizations, close to 60 in all. And Project Africa became a part of school in Powell River; elementary and secondary pupils established pen-pal relationships through Hibberd's contacts in Malawi and senior students engaged in advanced project studies of East and Central Africa.

But Project Africa really made an impact on Powell River when Dick Hibberd invited Dick Mattenje for a visit last summer. School was out at Ottawa U. and Mattenje was happy to accept. And Powell River was soon happy to 'accept' Dick Mattenje.

'The visit was a far greater success than I had ever hoped for,' Hibberd was to remark later.

'I'll be back,' a happy Mattenje has vowed.

The African teacher appeared in 10 elementary and secondary schools where he taught lessons about Malawi to classes ranging from kindergarten to senior matriculation. He was guest speaker at school assemblies and at various adult banquets and meetings. His initial public appearance at a Commonwealth Day ceremony was a rousing success and he spoke to over 500 children and adults. The school choir even sang the Malawi National Anthem. Mattenje became so popular that the Hibberd home became a booking agency for his services.

In addition to his activities in the schools, Mattenje talked to Department of Education officials and External Aid appointees in Victoria, was a popular figure at International House on the UBC campus during the summer session he attended, went on a motoring holiday to the Okanagan Valley with the Hibberds and led a busy social life in Powell River.

'I was in the Hibberd family for six weeks,' the African teacher said. 'They accepted me both as a friend and as a member of their family. I felt very much at home and my six-week stay seemed to last only one week.

'The Hibberds introduced me to their friends, who in turn were very friendly to me. They invited me to their homes.'

Dick Mattenje has undoubtedly seen more of Canada than many Canadians. He attended a meeting of Town Council as a special guest, accompanied the project engineer on a tour of a paper mill, took a guided tour over the mountains where logging is done and was taken on a plane ride so he could see more of the country around Powell River.

'I saw the building of roads, the felling of trees, the loading and transportation of logs,' Mattenje recalled. 'I was given VIP treatment and I came to honor the people for what they had shown me and done for me.'

Powell River seemed convinced that their visitor rated VIP treatment. There was hardly a soul in the community of 15,000 who hadn't met or heard of him and teachers praised his informative and easy way in the classroom.

'Project Africa certainly had its impact on this part of the Pacific Coast,' Dick Hibberd remarked.

Grade 6 pupils at one school made scrapbooks about Powell River and B.C. and Mattenje sent these to a school in Blantyre, Malawi. The Canadian children are now looking forward to receiving similar books from their African counterparts.

Dick Mattenje was no stranger when he walked the streets of Powell River. He was later to remark:

'When I was walking the streets I was amazed to hear children shout: "Hulio, Mr. Mattenje. Mummy, Daddy, that is Mr. Mattenje. He talked to my class about Africa"; and so on. These friendly shouts from the children will ring in my ears for a long time. I will remember these children.'

Powell River certainly remembers its African visitor.

'He left Powell River months ago,' said Dick Hibberd, 'and still a day never goes by in which enquiries are not made of him. Most people wish to know when he may return for a visit. It seems to me that Project Africa will have more than a token effect over the years on Canadian communities.'

Says Mattenje; 'I must say that what Mr. and Mrs. Hibberd have done for me is wonderful and I will always remember it. We all talk of how wonderful the world would be if people of different colors lived together but we do nothing beyond that. The Hibberds have proved something beyond mere talk—they have put it into practice. Their friends repeated this.'

And so the ripples spread. This year, the Canadian Teachers' Federation will send its biggest team ever on Project Africa. □

A UNIQUE TEACHERS' ORGANIZATION

TOM ALDCORN

THE CANADIAN COLLEGE OF TEACHERS is a national organization which draws its members from all levels of the teaching profession; elementary public and separate schools, secondary and private schools, administrative and supervisory personnel, teacher training colleges, faculties of education, universities, and departments of education. It is the one teachers' organization in Canada which provides a common meeting ground for all persons in the profession. This was one of the purposes behind its conception. Another purpose was to form an independent nationwide society of teachers which would be autonomous and unhampered by provincial restrictions.

In February 1966 the College was eight years old. The Canadian Teachers' Federation brought about the formation of the College of Teachers in the belief that such a body would be complementary to the federation. It was felt that the College could promote some ideas and concepts on a national scale because it was not constituted by ten provincial affiliates and that it would bring about more articulation between and among the different levels of the profession.

The College has already, on eight occasions, been able to bring together teachers from all levels for a sharing of information and ideas pertaining to education everywhere in Canada. Ideas have been discussed on a professional and intellectual plane. There is no doubt that such meetings have led to a certain rapport between the groups. The meetings have been addressed by members of the College and by some friends from outside the society. Papers have been given on history, biography, research, philosophy, and methodology. Teachers from the public and secondary schools have discussed these with university professors and officials of departments of education. In these discussions the stature of a person is measured more by professional competence than academic attainment.

The aims and objectives of the College as set forth in the constitution are not unlike those of similar organizations. The College is interested only in the professional side of teachers' lives and does not transgress on the prerogatives of teachers' federations, who originally concerned themselves with the protective aspects. The College hopes to establish a learned society within the teaching profession; to encourage the continued improvement in academic standing of teachers; to promote professional growth in teachers; and to improve the quality of public education at all levels. To establish the image of what is believed to be a good teacher of proven professional competence is one of the prime objectives of the College. It is hoped that the College will gain the confidence of departments of education across the country, so that just being a member of the College will put the stamp of approval on the individual. The College will eventually become a clearing-house for the dissemination and evaluation of new ideas. The hope is often expressed that the College will be a prestige organization, and that members will be given the same esteem as those of other professional colleges and academies. These, then, are the immediate objectives of the College of Teachers.

The author is president of CCT. The article is reprinted with permission from The Educational Courier.

All the papers and addresses given at past annual meetings have been published in a yearly journal of proceedings. The booklet is sent to all members each year. Current happenings each year are recorded in historical form and filed. These two articles will some day form the nucleus for a history of the College, and will be the basis of a reference and research library.

Requirements for admission to membership are a teacher's certificate, a degree from a recognized university, five years' successful teaching experience, good standing with other professional bodies, and contribution to educational, professional or community growth. A person without some of these requirements may apply and admission may be granted by the Council if the applicant is deemed to be a good prospective member. The membership committee screens all applications. If the applicant does not measure up to the standards set, admission is deferred or refused. In this way the College is building a membership of the highest professional order.

There are two classes of membership: members and fellows. A member may apply for fellowship after two years if he holds an earned second degree at the master's level or higher. An applicant for fellowship must submit to an interview with three fellows of the College.

A Council of nine members is the executive body of the College. The Council is responsible to the membership for its actions. It acts for the College between annual meetings. From the members of Council, the president and the vice-president are chosen. The Council appoints a secretary-treasurer and an office assistant. There are four standing committees: membership, fellowship, editorial, and program. The office of the College is in the Canadian Teachers' Federation House, 444 MacLaren St., Ottawa 4, Ontario.

Some names that have given support and dignity to the college are:
Dr. S. G. McCurdy, FCCT, St. John's, Nfld.
Dr. Frank MacKinnon, Charlottetown, P.E.I.
George MacIntosh, Halifax, N.S.
G. Forbes Elliott, FCCT, East St. John, N.B.
Professor D. C. Munroe, FCCT, MacDonald College, Quebec.
Dr. George Flower, FCCT, Toronto, Ont.
Miss Sybil Shack, FCCT, Winnipeg, Man.
Hon. George Trapp, Regina, Sask.
Dean M. E. LaZerte, FCCT, Edmonton, Alta.
Miss Mollie Cottingham, FCCT, Vancouver, B.C.

Would you care to identify yourself with these? If so, write for an application form. □

#165.00

A MATTER OF OPINION

ARE TEACHER EDUCATION PROGRAMS UNREALISTIC?

I. N. BERLIN

MOST TEACHERS ARE BEING TRAINED to teach children from stable homes, children who tend to stay in the same school district most of their lives, children whose parents' aspirations for them are similar to those which professors of education probably have for their own children. In many cases, these are not the kinds of children teachers find in modern classrooms. Psychotic disorders and severe character disorders appear to be increasing in early childhood. Antisocial, aggressive, hostile behavior seems to appear more frequently and the ties between parent and child seem more fragile than ever.

Investigation has shown that in many cases the best teachers have had special training in teaching emotionally disturbed, retarded, or handicapped children. This seems to have prepared them more adequately for the 'normal' classroom of today.

The general belief that teachers must suppress their own feelings of upset, discouragement, and anger about difficult classroom situations and should always present a facade of loving calm is unfair to teachers. The emotional cost is too high. The prevalent expectation that new teachers have of themselves is that they must love all their charges and that if they are good and effective teachers, their students will love them.

Teachers who have been taught that undying love will work miracles with children who are sullen, indifferent and angry have been done a disservice by their teachers and supervisors. The reality is that it is impossible for many teachers to love 35 to 45 students, many of whom are behavior problems. Expressing feelings of anger, frustration and hopelessness does not make a teacher a 'bad' teacher.

Unrealistic teacher education often stems from the fact that many professors and supervisors have been so far from classroom experience themselves for so long that they are applying educational principles to a hypothetical and often nonexistent child and classroom. The student-teacher too often practises on motivated children who have already been well started in their learning by an effective teacher. Classroom problems seem to center on curriculum. Rarely are student-teachers helped to learn how to keep their heads above water and to survive in an atmosphere of educational chaos.

The prompt expression of a teacher's annoyance and anger toward a disruptive child, coupled with some personal attention to help him begin to do some school work, may begin to settle such a child down, whereas an exasperated or sweet reminder without any follow-

The author, of the Department of Psychiatry, University of California, is psychiatric consultant to the San Francisco schools. The article was supplied by CTF Distribution Service.

Cockfield, Brown & Company Limited,
200 Canada Cement Building,
Montreal 2, Quebec.

OK M-16694

125 - 15% = 125 - 18.75 = 106.25

through or help is like the water that runs off a duck's back. Direct expression and sharing of one's feelings with sympathetic colleagues is also an important safety valve.

Most new teachers are not prepared for the emotional immaturity of their pupils. They are not helped to understand that hyperactivity, truculence, indifference, and withdrawal may all be expressions of disordered parent-child relationships. Unless one is informed about such behavior, it is difficult to recognize it as a call for help and often a desperately expressed hope that some adult will provide the persistent concern that his parents, for various reasons, are unable to give.

Teachers are frequently told now that it is their job to diagnose and treat the emotional problems of their students. How teachers are to find time to carry out this function, to say nothing of learning new techniques and methods which take many more years of training, is a mystery. However, the educative efforts of skilled teachers play an important part in the recovery of even psychotic children. Beginning to learn academic material is one way of beginning to deal with the real world. In teaching, the teacher is performing an important mental health task.

Today's teacher education institutions must begin to help their students cope with parents who want to have nothing to do with their child's education. Many parents today place the whole problem of the child, his discipline and behavior, in the teacher's lap for solution. Teachers must recognize the existence of such parents and learn that one approaches these parents not with accusations which increase their feelings of frustration and helplessness, but with some statement of the child's potential for learning and a discussion which stresses some possibility of working the problems out. Helping dissatisfied, unhappy parents to feel important to their child is no small accomplishment. □

Craigflower School

THE FIRST SCHOOL in British Columbia was a private one conducted by the Reverend Robert Staines, Chaplain of the Hudson's Bay Company at Fort Victoria in 1849. At about the same time Father Lamfrit, a Catholic missionary, started a Catholic school in Victoria. By 1855 there were schools in operation at Victoria, Esquimalt, Nanaimo and Craigflower, on the outskirts of Victoria. The Craigflower school-house is the only one of these pioneer schools that remains standing today. Indeed, it is the oldest school building west of Winnipeg.

It stands among fine old maple trees beside the quiet waters of the upper arm of Victoria's harbor. Its first teacher was Mr. Charles Clarke, who came by sailing ship around the Horn. The rooms on the top floor of the school were the living quarters of the schoolmaster and his family.

Today the school building is preserved as an historical museum by the Native Sons and Daughters of B.C. □

$125^{00} - 15\% = 125 - 18^{75} = 106^{25}$
Vickers + Benson Ltd,
630 Dorchester Blvd. West,
Montreal 2, P.Q.

165 - 10% - 15% = 165 - 16.50 - 22.27 = 126.23

165 - 15% = 165 - 24.75 = 140.25

McKim Advertising Ltd.
1155 Dorchester Blvd. West,
Montreal 2, Quebec.

journalism to the rescue?

LAST MONTH I MENTIONED one or two areas in which English as communication seemed to me to be bogged down. There is no doubt in my own mind that those operating at the higher levels of English scholarship appear to have an aversion to the use of clear and concise language, preferring to dress up the simplest idea in ponderous, pedantic prose. They seem far more interested in *how* something is being said than in *what* is being said.

I have a feeling that one reason for so much dull writing on language at the higher levels is that most of the writers never had to compete on the open market with full-time professionals; have seldom had to get and keep the attention of editors and readers other than specialists like themselves.

When you are writing for a select group of specialists on topics of (let's admit it) limited appeal, and when you are assured of publication in a safe, non-competitive professional journal, you don't have to worry about clarity, precision or economy. You can be as woolly as you want—your readers are conditioned to it, and won't complain.

If all this could be confined to the world of specialists, no great harm would be done, but these people are supposed to prepare teachers of English who are supposed to help secondary school students to use their language effectively. The mandarins don't seem to be aware of the fact that the purpose of the secondary school language program is not primarily to produce specialists in ever-narrowing fields of English scholarship. I can't see the connection between the possession of a Ph.D. for work on Shakespeare's use of the infinitive and the ability to show a secondary school student how to write.

How, then, do we plan a program for teaching the great bulk of our students who are not, repeat *not*, going to go after a Ph.D. on some obscure seventeenth century poet, to write acceptable prose, how to communicate?

We might try asking professional writers how they learned to write. We might ask the help of the first-rate journalists and others who earn their living by writing, full-time. We might use as texts, not the dreary language books prepared or supervised by the mandarins, but those written by the professional writers. We could use for supplementary reading and study the best newspapers and magazines published here, in the U.S.A., and in Great Britain.

We could see to it that a course in journalism was offered in every secondary school, and that as many students as possible were encouraged to take it. It would do them far more good than the time spent in weary, if not downright bored, analyses of the poets of the Romantic Period, or in writing 'My Autobiography.'□

N/C

FROM OUR READERS

Can You Help?

Vancouver, B.C.

Sir,

I am preparing an historical study of childhood and family life in Canada between 1890 and 1920. To make this work as accurate and as authentic as possible I would like to examine family papers for the period. I am particularly interested in anything written by children (such as letters, diaries, school exercise books, club minutes, etc.) and by adults which describe family or children's activities in the home, the school, or in the community.

If any teacher or school has such material and is willing to lend it to me for a short time, it can be sent to me at the Faculty of Education, University of British Columbia Vancouver 8, B.C. If other arrangements are necessary, please telephone me at 263-3968.

All material sent in will be returned.

NEIL SUTHERLAND

A Secondary Teacher Protests

Vancouver, B. C.

Sir,

Your issue on the elementary school was excellent, containing as it did some very thought-provoking articles, but did you have to go from the sublime to the ridiculous? Every teacher is entitled to his opinion, but he should give some thought as to how he expresses it. With reference to the article 'Elementary Teaching is Harder than Secondary Teaching,' I would like to ask Mrs. McDonough a question.

Is it not possible to praise ele-

Adair Advertising Agency
207 West Hastings
Vancouver

78-10%-15% = 78-7.80-10.53 = 59.67

mentary school teachers for the fine job they are doing, often under difficult circumstances, without pulling all secondary teachers down into the mud and trampling on them in order to make the point? This kind of writing is pretty poor stuff and, I would have thought, unprofessional. I was disappointed to see that Mr. Cianci also lowered himself to join in the mud-slinging.

Good teaching is to be found at all levels of education from nursery school through university, and good teaching is necessary at all levels of education. Because the problems encountered at each level are different, the stresses and strains on teachers are different, but they are nonetheless real. Mrs. McDonough's statement that marking forty papers at the elementary level is 'unmitigated drudgery' is frankly hilarious. She is welcome to come and mark forty Grade 12 essays any day and see if she feels like dancing in the daisies afterward!

I do not feel that my friends in the elementary schools—and I have many, as I taught there for some years — would feel flattered to think that the only way Mrs. McDonough and Mr. Cianci can find justification for their work is by belittling their colleagues in the secondary schools. The high quality of work done in the elementary schools does not have to be put to shame in this way. It can speak for itself. Try looking at the stars, Mrs. McDonough, instead of the mud.

MARY ASHWORTH

Elementary Schools Need Counsellors Too

North Vancouver, B.C.

Sir,

Congratulations on your issue on the elementary school. Few teachers would disagree that the foundations for future development, academic or otherwise, are laid in the elementary school. The unique tasks outlined by Mrs. Cull—helping a child to know himself, arousing curiosity and the desire for knowledge and the enjoyment of learning for its own sake—surely are the most crucial tasks in all education.

My one regret was the omission of any reference to the need for increased psychological and counselling services in the elementary school system. For one reason or another, the outlined unique tasks are not being wholly accomplished, and at early ages children are displaying, apparently in increasing numbers, behavior that indicates problems in the learning and/or emotional areas.

In a survey conducted on the North Shore in 1964 to ascertain mental health needs principals reported that 10% of the student population needed additional referral services, and over half of these students were in the primary and intermediate grades. In its briefs to the Government of British Columbia in the last two years, the B. C. Parent-Teacher Federation has requested an extension of services in these areas. The University of B.C. offers training courses for both elementary school counsellors and for school psychologists, in an attempt to provide for the emerging needs of the province.

Because there appears to be such widespread concern about the difficulties encountered in these areas —the diagnosis and treatment of learning, behavior and emotional problems—I regret that *The B. C. Teacher*, the official journal of the professional body, made no reference to this need. Apart from a passing remark by Callbeck, I saw no mention of the fascinating research centering on the nature of the learning process itself, research that will have great implications for elementary education, and little to indicate we have any awareness that societal demands on the school are changing.

I realize that all areas cannot be covered in any one issue, but I am perturbed about the loss of potential human resources that will result if this group of the 'disadvantaged' in our schools does not receive more consideration.

(MRS.) SHEILAH THOMPSON

IMPORTANT NOTICE

Secondary teachers are advised that Botany 302 may be taken for Permanent Certification in place of Botany 105 or Botany 205, which have been discontinued permanently. A teacher who has taken some Zoology courses will be admitted to Botany 302.

N/C

8% 22 10

Spalding Music & Photo Ltd.
770 Bay Street
Toronto 2, Ontario

270 - 10% - 15% = 270 - 27.00 36.45 - 2.01

Young & Ross Advertising,
326 West Pender Street,
Vancouver 3, B.C.

165 - 15% - 5% = 165 - 24.75 - 7.01 = $133.24

Teachers in the Nongraded School

Continued from page 259

It is not easy to assume the responsibility called for in a nongraded classroom. No longer can the teacher go to the textbook room and check out a set of fifth grade math books. He must begin by assessing at what point each child is able to function, and build the next appropriate skill on a stable foundation. In doing this, the teacher has the satisfaction of knowing that he is not making mathophobes out of the children who are not ready for fractions and that he is not developing indolence and indifference in those children for whom fractions are too easy.

When I used to teach in a graded classroom, I always existed in a frenzy of apprehension for fear I couldn't get place value taught to Johnny before his mother found out he wasn't having long division with the rest of the group.

In a nongraded school, we never have the rigid floors and ceilings of expectations that existed in the traditional graded materials. In a nongraded room, those graded books with dots on the back don't have the power to say, 'Everybody should be here.' Consequently, children do not need to experience failure and they cannot attain success without effort. As a result, they should become more self-propelling in their learning.

Teaching a nongraded group is based on the same learning principles as good teaching in any group. Teachers present appropriate material at the correct level of difficulty for each child. The difference is that in a nongraded school they do it openly, for it is what they are expected to do, whereas in a graded group some teachers have to bootleg appropriate learning opportunities.

It is easy for a teacher to get caught in a platitudinous trap and wail, 'I can't prepare thirty different lessons for thirty different children!' No one expects him to. The tailored education of nongrading does not mean a different lesson for every child, but rather an appropriate lesson for each. With practice teachers develop skill and facility in modifying academic content and teaching strategies so that they will be in keeping with realistic but rigorous expectations for children. (You should see me drive my new car now!)□

N/C

NEW BOOKS

C. D. NELSON
Book Review Editor

A FEW RANDOM COMMENTS to open the page. First, in response to February's editorial comment, we received three enquiries about book sellers and dealers in Vancouver. It is not our policy to give free advertising to such agents through these columns; however, individual replies to your letters will be sent. Meanwhile, our thanks to the observant and interested readers who wrote in.

We welcome another new reviewer this month—Mr. G. N. Joyner, who is vice-principal of Ladner Elementary School. He is evidently a keen mathematician. A great many recent books have arrived in this crowded office, and a substantial shipment was made to our far-flung correspondents in time for them to pass the Easter vacation profitably!

The long-awaited new edition of the *Basic List of School Library Books,* formerly called *Library Books Authorized for Use in the Public Schools of British Columbia* has at last made its appearance—the first major revision in ten years. As one of the members of the Revision Committee, I can only sigh with relief and hope the new list will prove to be useful to teachers and librarians. I would also welcome a review of it—any takers?

One of our readers has made the suggestion that this space include reviews of older titles, and that our masthead be changed to 'Books New and Old.' I appreciate his keen interest in reading, and the value of such a departure from our present format. I am bound to admit, however, that our role is clearly defined as that of acquainting teachers with new and current publications only. The few exceptions to this would be new editions of older titles, and then only when the revisions are significant. I might suggest to our correspondent, who lives in Vancouver, that the Public Library has a fine collection of annotated bibliographies, such as the *Standard Catalog for Public Libraries* and the *Book Review Digest,* which will adequately fill the purpose. C. D. NELSON

EDUCATION

The Professional Education of Teachers: A Perceptual View of Teacher Education, by A. W. Combs. Allyn and Bacon, Boston, 1965. $2.95

Since the effectiveness of education depends on the classroom teacher, the author advocates a thorough overhaul of teacher-education programs. Such education, he believes, should not be aimed at producing a teacher with a long list of competencies who has been trained in so-called 'good' general or specific methods of teaching. Rather, it should aim to develop the student-teacher as a unique human being who has learned to use himself as an instrument in achieving the development of his pupils.

The philosophical basis of the author's view rests on 'self' or 'perceptual' psychology which stresses that behavior at any given instant is the result of how an individual sees himself (his self-concept), how he perceives the situations in which he is involved, and the interactions of the two. As a result, teacher-educators must be deeply concerned with developing student-teachers as persons. Their job will be to encourage and facilitate, in their students, the acquiring of: rich and extensive perceptions about their subject fields; accurate perceptions of what pupils are like; perceptions of self which lead to a feeling of adequacy; accurate perceptions about the purpose and process of learning; and personal perceptions about *appropriate* methods for carrying out their own purposes.

Preparing student-teachers is not a matter of showing them 'how.' It is a matter of helping each student to discover his own best method of teaching. There is no 'right' method. Rather, it is a question of an appropriate method which fits the student's perceptions of himself, of the nature of the school subjects, of what students are like, and of how pupils learn.

The author believes that the traditional method of dividing the teacher-education program into set courses of educational psychology, philosophy of education, etc., should be discontinued and that other provisions be made for helping pupils to experience, at one and the same time, exposure to ideas, involvement in practice, and discovery of personal meaning.

The discovery of personal meaning should be provided by twice-a-week seminars involving up to 30 students and one or more instructors in free discussion of ideas, planning courses and experimenting with different materials.

Exposure to ideas would take place through: lecture-series by faculty members who were authorities on a given topic; lectures by speakers outside the faculty; panel discussions on important topics; full use of audio-visual material; special workshops; and trips and exhibits.

Providing practical experience should involve students with young people in and out of school in a variety of settings: practice-teaching, not after the student has learned how, but as a means of creating his desire to know and of trying himself out; observation which would raise questions in the mind of the observers; involvement in young people's groups (Scouts, boys' and girls' clubs, community recreation, nursery-schools, etc.). Students should also be involved actively in teachers' professional organizations (committees, local meetings, conventions, etc.) as well as in Parent-Teacher meetings and in attending school board meetings.

This book is interesting and stimulating. I recommend it not only to those members of the profession more directly interested in teacher-education but also to every classroom teacher. Practically all the ideas discussed in the book could be applied by teachers to the development of pupils in their own classrooms.—S. R. Laycock

ENGLISH

Canadian Reflections: an anthology of Canadian prose. Ed. Philip Penner and John McGechaen. Macmillan of Canada, Toronto, 1964. $1.75

The criterion for inclusion in this moderately priced anthology was that the material should be 'eminently teachable,' also to show high school students that Canadian literature is not only important, but also lively and interesting. It seems doubtful to this reviewer that one more dose of the 'paddle and axe' mixture will dispel the widespread impression that Canadian literature is dull stuff; however, Part 3, 'People and Language,' which contains some interesting articles showing our language is related to our national life and history, may stimulate further inquiry.—J. R. Stickney

Canada Books of Prose and Verse: Reading Study, Book I, by H. M. Covell and J. McGechaen. Ryerson/Macmillan, Toronto, 1964. $1.25

A companion to *Beckoning Trails,* the Grade 7 reader of this well-known series, but designed to be used independently if desired. It aims to ensure balanced development of reading skills, using a wide variety of reading materials which include literary works of prose and verse, passages typical of school texts, and ex-

tracts from newspapers and magazines. These interesting selections are studied by the P-Q-R-S-T Method (Preview-Question - Read - Summarize - Test), with exercises covering vocabulary and comprehension skills. Achievement tests make sure that the student's progress is checked regularly while the diagnostic chart provided on the cover allows ready identification of strengths and weaknesses.—Eileen Burke

MATHEMATICS

Elementary School Mathematics, Book 5, by R. E. Eicholz, P. G. O'Daffer, C. F. Brumfiel and M. E. Shanks. Addison-Wesley, 1965. (Can.Agt. J. McAllister, 1235 Comox St., Vancouver 5; 682-2546) $3.32

The Grade 5 text of the series *Elementary School Mathematics* (kindergarten to Grade 6) was examined and carefully compared to the Book 5 of *Seeing Through Arithmetic* (Gage). It was found to be superior on the following counts:

(a) 13 chapters organized as individual units, each one complete.
(b) supplementary exercises at end of text keyed to specific pages.
(c) 'Think' problems to enrich and stimulate the better student, plus more difficult questions at the end of many exercises.
(d) more questions, better numbered.
(e) each chapter begins with basic ideas and develops them fully.
(f) attractive format.
(g) content mature for Grade 5.

One complaint is that some sections, i. e., *Averages,* are developed too quickly, as if they were covered in a previous text. It is a book designed for the teacher who is skilled and interested in mathematics, and not for one who expects the book to teach him as well as his pupils. A workbook and an excellent Teacher's Edition are also available.—G. N. Joyner

Experiences with Geometry, by R. E. Eicholz and P. G. O'Daffer. Addison-Wesley, 1965. (Can.Agt. J. McAllister, 1235 Comox St., Vancouver 5; 682-2546) No price given

This new workbook follows the author's statement of purpose: 'to supplement a basal mathematics program . . . that the pupils encounter exciting and stimulating experiences in geometry.' The 20 lessons develop major geometric principles and skills. Interspersed with the lessons are several sets of geometric games and puzzles which provide both entertainment and discovery. Instructions are explicit so that most classes should be able to follow them without difficulty. A well designed layout gives the appearance of a 'fun' book rather than a workbook. Excessive use of compasses in 'trial and error' exercises could lead to a pincushion look on subsequent pages, perhaps destroying some of their value. (A backing sheet could be used by the pupil.) An excellent teacher's guide is available. *Experiences with Geometry* is a book worth investigating as a supplement to mathematics in Grades 5 to 8.—G. N. Joyner

Mathematics for Parents, by Carl B. Allendoerfer. Collier-Macmillan, Galt, 1965. 167 pp. $3.30

The author, a professor of mathematics at the University of Washington has attempted, in this book, to answer the many questions about the 'New Mathematics' which he encounters as he moves about in public.

The first four chapters, which can be understood by any parent, describe the nature of the current revolution in mathematics and make suggestions for parents who are interested in the best mathematical education of their children. Very little technical mathematics appears in these chapters.

The last nine chapters are for parents who have a high school education, or its equivalent in experience, and who are willing to do a little thinking and work to understand some of the more important technical changes that have occurred recently. These chapters deal with: numbers; sets, functions and relations; the

181.50 − 15% = 181.50 − 27.23 = 154.27 (duplicate invoice)
Industrial Advertising Agency Limited, + 4.50 repair to plate
1255 Yonge Street, = 158.77
Toronto 7, Ontario.

laws of algebra; inequalities; inequalities in the plane; geometry; trigonometry; and logic.

Since, as the author points out, some general knowledge of the basic ideas of the new mathematics is a necessary passport to 'literate' living in the world of modern technology and automation, this book should be required reading for elementary and high school teachers who are not trained in mathematics. It will enable the teacher to explain to parents something of the New Approach to Mathematics in schools—and can be recommended for reading by the intelligent parent.—S. R. Laycock.

Senior Mathematics 1, by H. A. Elliott, J. W. Fencott, K. D. Fryer, and N. J. Hill. Holt, Rinehart and Winston, Toronto, 1964. 441 pp. No price quoted.

This textbook by Canadian authors, is written for Grade 11 in Ontario. It contains fifteen chapters on material from algebra, deductive and analytic geometry, and trigonometry, with answers.

The authors have tried to use modern terminology and ideas in presenting their work. However, they are guilty of making many careless definitions and undesirable statements. For example, after stating that an angle is an undefined term, they proceed to give an artificial definition; they define a line segment using the concept of a point being between two others before this concept has been defined; they present fractions as numbers isomorphic to the rationals and not as names for them. The book touches upon too many topics from various branches of mathematics, and consequently it suffers from too low a level of rigor. The topic of simultaneous linear equations has been done quite well, and red ink has been used to emphasize important ideas.

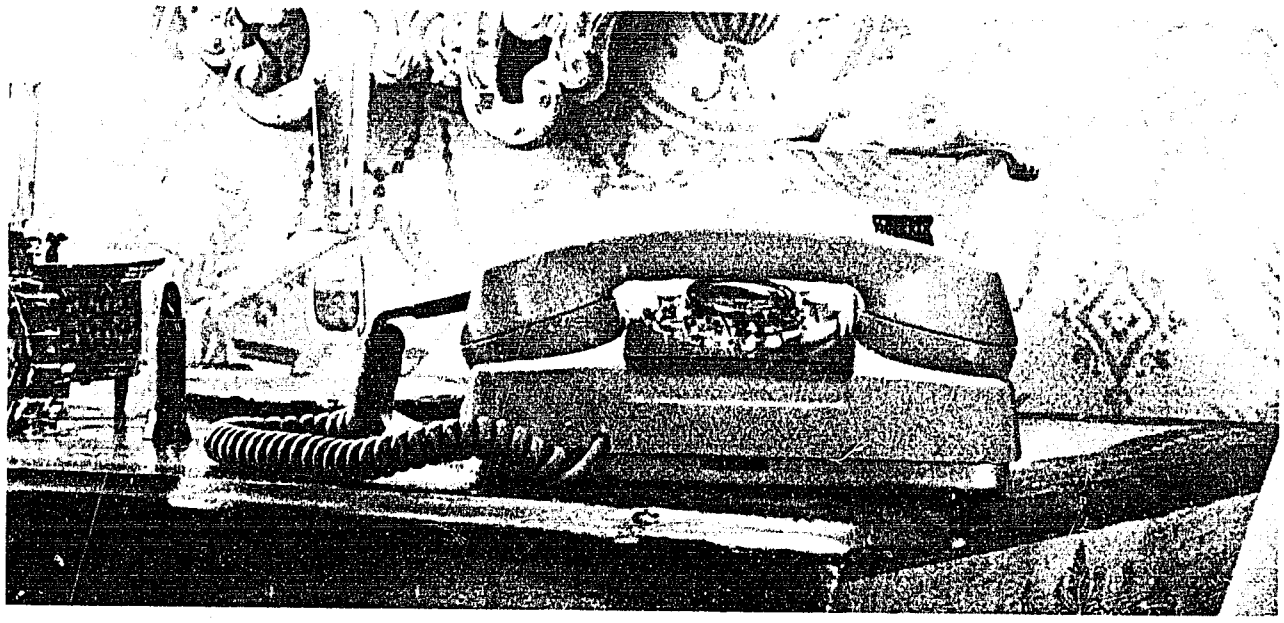
I see no place for this book in B.C.'s mathematical picture—not even as a supplement or reference.—D. K. Shimizu.

MENTAL HEALTH

No Language But a Cry, by Bert Kruger Smith. Beacon Press, Boston, 1964. $5.00

This book was written by a mental health specialist of the Hogg Foundation of Mental Health and gives a warm, sympathetic and sound account of the characteristics and problems of seriously emotionally disturbed children together with a description of types of facilities for their treatment and education. Visits to three outstanding facilities for such children are described — those at The League School, Brooklyn, The Sonia Shankman School, Chicago, and The Hawthorn Center, Northville, Michigan. The final chapter gives specific recommendations as to what can be done for these youngsters. Since the children are often wrongly diagnosed as mentally retarded, delinquent, or deaf and since facilities for seriously disturbed youngsters in Canada are very inadequate, this book should have a wide group of readers. It should appeal to teachers, social workers, nurses, and to community leaders in mental health.—S. R. Laycock

Glamorize your home with convenience



Of all the things you can do to improve your home, nothing adds so much for so little as a colored extension telephone. It saves you thousands of steps a year, gives you privacy when required, brings that glamourous modern note to any room in your house. And the cost is only a few pennies per day!

AN EXTENSION FOR YOUR TEENAGER can bring important fringe benefits for you, too! Teenagers being the talkingest people in the world, you solve at one stroke the problem of having to listen to them endlessly. Also, teenagers save you a lot of steps by answering the phone automatically, every single time it rings. A well-mannered teen is almost as good as having a butler to take your calls!

BUSY MOTHERS, BABIES AND KITCHENS go together naturally with a Speakerphone extension. At the flick of a switch your hands become free again—you listen over the compact loudspeaker and talk back over the sensitive microphone. Meanwhile, carry on giving Junior his formula, preparing the dinner or mixing the cake. In fact, the Speakerphone makes kitchen calls a piece of cake every time!

HOBBY SHOP PROJECTS are a demanding and often intricate affair which should never, NEVER be interrupted! No more rushing upstairs or into another room when the phone rings. Take the call the modern way, and still concentrate on that important work-bench project. Find out more about these glamorous low-cost home aids TODAY, without obligation, from your B.C. TEL Business Office.

In Vancouver call 683-5511

If calling long distance, ask the operator for ZENITH 7000 (there is no charge).

B.C. TEL

BRITISH COLUMBIA TELEPHONE COMPANY

408C-6-REX

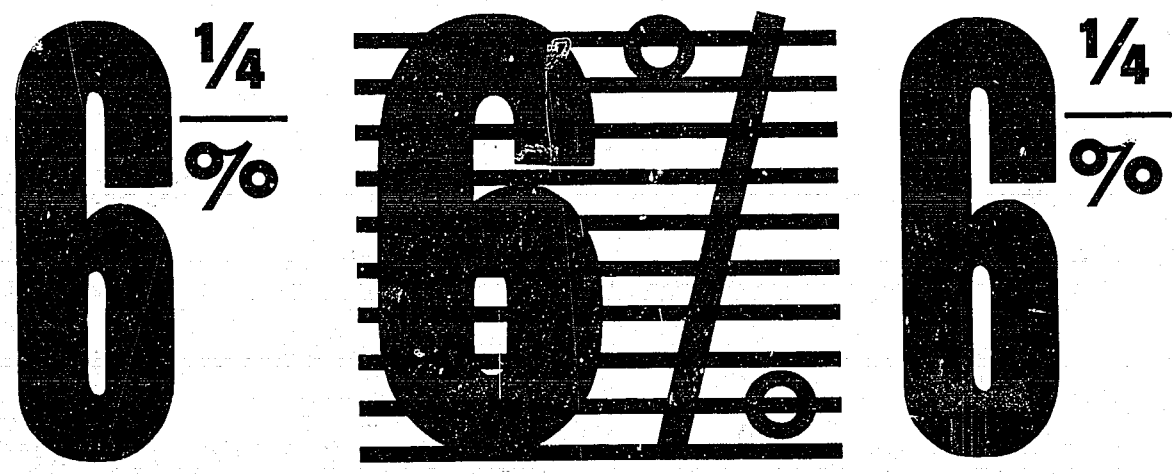
WORLDWIDE TELEPHONE CONNECTIONS • INTERNATIONAL TWX AND TELETYPE SERVICE • RADIOTELEPHONES • CLOSED CIRCUIT TV • INTERCOM AND PAGING SYSTEMS • ELECTROWRITERS • DATAPHONES • ANSWERING AND ALARM UNITS • OVER 300 OTHER COMMUNICATION AIDS FOR MODERN HOMES AND BUSINESS

270 + 212 - 10% = 270 + 89.25 - 33.75 = 307.25 + 71.00 Cover Agreement =
378.25

B.C.T.F. Co-operative Association

1815 West 7th Avenue, Vancouver 9, B.C.
Office Hours:
Monday to Friday—9:00 a.m. to 5:00 p.m. Saturday—9:00 a.m. to 12:00 noon
REgent 1-8121

INVEST NOW in
CO-OP LOAN CERTIFICATES
and
EARN



ON MULTIPLES OF $50

FEATURES

1. A secure investment
2. Easy to redeem
3. May be left to compound [redacted]
4. Interest accrues on a **daily basis**
5. Interest is calculated to December 31 each year and paid **or** reinvested (depending on the investor's desire) early in January

PROVIDES

1. Educational funds for the investor's family
2. Funds for retirement
3. A build-up of savings for summer months
4. A build-up of savings for down-payment on a home or auto
5. A liquid savings account for whatever purpose the investor desires

INVESTMENTS MAY BE MADE BY LUMP SUM AMOUNTS OR BY MONTHLY PAYMENTS