NOVEMBER 1966 VOL. 46 No. 2

the BC teacher

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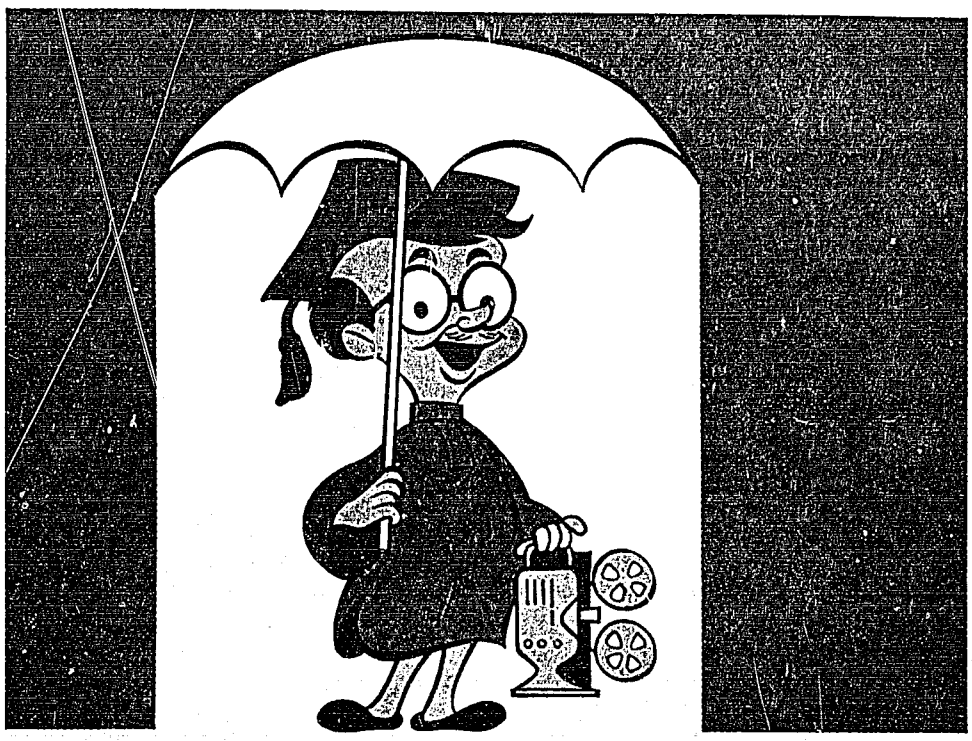

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Cover Picture

Our cover picture this month shows a scene which could really have occurred, for camels were used as pack animals for a very short time. The painting is one of a series by Bob Banks, commissioned by the B. C. Centennial Commission of 1958. Permission to use the paintings was granted by the Provincial Archivist. The cover story is based on materials originally prepared by Dr. F. H. Johnson and W. H. Auld.

Photo Credits

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a teachers' commission on education

THE ONTARIO TEACHERS' FEDERATION has recently appointed a small commission to help its members keep abreast of educational trends and developments so that the organization will have some chance to influence the direction of educational change. The pace of change in Ontario is so fast that on occasion, it has been found, new educational policies are adopted and announced by the Department of Education before the Federation has had time to adopt any policies of its own.

The concern of the OTF is understandable. Teachers' organizations generally have as one of their aims the advancement of education and to this end they have struggled over the years, often with considerable success, to win for themselves the right to make representations, to be consulted or to be involved on a partnership basis concerning developments in the school system. Today the right to be consulted or to participate may be threatened, not by any deliberate desire or intent of the authorities to ignore the organizations, but by the failure of the organizations to prepare themselves to participate intelligently and effectively in the decision-making process. In this time of rapid change the experts and the specialists tend to get the serious attention. Any organization that does not keep at least some of its members in the forefront of developments to the point that they can make some reasonable claim of expertise, by its own complacency, casts itself in an onlooking role. Through its proposed commission on education the OTF hopes to recapture the leadership position that seemed to be slipping away from it by default.

Education today is generally accepted as having an important contribution to make to personal development and to social and economic progress while at the same time there still exists a great deal of public misgiving and concern about the quality of education offered by the existing school system. Royal commission reports in almost every province in Canada and injections into the school system of vocational programs have allayed some uneasiness, but enough distrust is left to create a climate of opinion which favors innovation. In this atmosphere the public and the elected representatives of the public would welcome from the teachers' organizations clear cut statements on educational objectives and needs and on the merits of the many innovations currently being promoted, sometimes by agencies whose motives are clearly profit-oriented. Any pronouncement offered by the teachers, however, to carry any real weight will have to be supported by serious study and reflection.

In this there is a challenge to the teachers' organizations, a challenge to go beyond consultation and participation into direct promotion of ideas and policies which will win acceptance because they are well thought out and in the public interest.

The BCTF has demonstrated that a teachers' organization can influence the direction of educational change. For example, while the victory is by no means complete, external examination systems are being considerably modified and continuous progress is gradually becoming much more than a mere slogan as a result of conferences, studies, publications and debates sponsored by its professional development division dealing with these two topics.

The BCTF through its Curriculum Directors even has a kind of education commission in existence already. Given only slightly broader terms of reference, the Directors would function as an 'education commission' as envisaged by the OTF.

Would only that we had the resources that the sixty-seven thousand teachers of Ontario can easily provide to support our little education commission. □

SINCE THERE IS NO clear-cut evidence to demonstrate that any one program is superior to all others, experimentation and innovation in teacher education seem highly desirable. And since individual differences are as apparent in potential teachers as they are in pupils, it seems reasonable to assume that a program which is appropriate for men and women in their early twenties may not be suitable for graduates who have spent several years in business, industry or the home.

The Teaching Internship Program—Secondary (TIPS) soon to be established at the University of Victoria has been planned with these two considerations in mind. It represents a search for a new curriculum which will provide an effective pattern of teacher education for the mature person who has held one or more degrees for some time, as opposed to the younger individual who is newly graduated from university.

The members of the two broad age groups just mentioned have quite different backgrounds upon which to build a period of professional preparation. The potentially greater experiential 'maturity' of the older group may make it possible and even desirable to provide them with a program which departs from many traditional curricula. For these reasons, then, and to make it attractive to the special group for which it was intended, the new program will differ rather markedly from the regular one now taken by younger students at the University of Victoria.

To be eligible for TIPS, applicants must be at least 28 years old and must have held a bachelor's degree for at least four years. In addition, to be admitted into the program they must have a satisfactory academic record and must have appropriate teaching majors. In other words, they are expected to have the same academic qualifications as those applying for the present one-year graduate program (secondary). Applicants who satisfy these requirements will be interviewed by personnel officers in co-operating school districts and members of the Faculty of Education at Victoria. Those who are admissible and who are willing to accept a position offered in one of the co-operating schools will be enrolled in the program.

This 'internship' program has been discussed with the various organizations and groups concerned with the preparation of teachers including the Department of Education, the B.C. Teachers' Federation, the B.C. School Trustees Association, the Joint Board of Teacher Education and the Senate of the University of Victoria. All have concurred in the desirability of a field trial of the program, provided that certain safeguards are an integral part of the project. These safeguards include careful *selection* of the candidates and continuing *supervision* by the University. They also include careful and continuing *assessment*, and to this end evaluative instruments and methods are being developed. The research features of the program will start even before the interns enter the classroom. In addition, comparative data will be obtained from students in the one-year graduate program and will be used for assessment purposes.

The University will be responsible for conducting the research and for the selection, supervision and assessment of the students, but always with the assistance and advice of the teachers and administrators in the co-operating schools. The results of discussion and conferences already held with school superintendents and with teachers and principals in the junior secondary schools of School Districts 62 and 63 (which will be responsible for the first phase of the program) augur well for a successful experience for the appli-

Dr. Tyler is Dean and Dr. Monk a member of the Faculty of Education, UVIC.

UVIC'S TEACHING INTERNSHIP PROGRAM

cants. It seems certain that co-operative interns will be well received by the teachers and will become members of the teaching staff in a very real sense. The important role played by members of the profession in this program cannot be overemphasized. The University is indebted to them for their willingness to experiment with this pattern of teacher education.

The TIPS program has been planned in four phases: instruction in methods together with observation and student teaching at chosen junior secondary schools; a summer session; a year of full-time internship teaching; and a second summer session. Details of each of these phases follow:

Phase I. Supervised Teaching

Applicants who are admitted to this program will be assigned in May and June of 1967 to one of the six junior secondary schools in the Sooke and Saanich districts. In general, each intern will be under the guidance of two teachers according to his subject specialties, although in some instances it may be necessary to assign him to more than two teachers so that he may have an opportunity for an optimal amount of classroom experience.

In the early stages of this phase of the program the intern will devote part of each day to classroom work and part to a consideration of both the general problems of instruction and the school curricula in his particular teaching fields. The latter will be under the charge of a member of the Faculty of Education but will be planned and developed with the assistance of the supervising teachers in the participating junior secondary schools. Such a close liaison between the faculty and the teachers will make it possible to plan and supervise an effective program of instruction for each intern.

Teaching assignments will be made by the teachers as early as possible in May. Thus, in the first two weeks the interns can receive instruction and can be given considerable help in planning both the teaching and evaluation of an extended series of lessons for which they will be held responsible. The co-operative guidance they receive in this period from the teachers and the faculty should do much to ensure a maximum understanding of goals, purposes, methods, and content on the part of all concerned.

For the next five weeks the interns will be in the classrooms for the whole teaching day although, especially in the early stages, they may not teach every period. When they are not teaching they will be able to visit other rooms or prepare their lessons with the help of other teachers and the university supervisors.

Toward the end of June the amount of co-operative instruction may have to be reduced to enable the classroom teacher to bring his own work to a conclusion. Nevertheless, the interns can continue to give individual instruction to the pupils and can take part in those activities which come at the end of a school year, including the preparation and grading of examinations, the preparation of various reports, and so on.

Phase II. Summer Session (1967)

The interns will register for six units of work at the 1967 summer session of the University of Victoria. The curriculum of the summer study is not yet planned in detail, but it will not be a replica of specific courses in the winter program for the professional year. In the initial stages of an innovative program there is an opportunity to experiment with content that varies from that found in curricula that have become established and have the weight of tradition and known

results to support them. The possibilities inherent in TIPS, as in any novel approach, will be realized only if attempts are made to assess the merits of different content and of modified sequencing of this content.

Educational and adolescent psychology, philosophy, sociology, and anthropology contribute valuable guides to effective instruction and instructor behavior. But the traditional curricular sequence may not be the most effective one that can be devised. Are there parts of these disciplines that could well be postponed until after an individual has had a serious and extended introduction to teaching? For instance, is it possible that some of the material on learning would be more significant after a year of teaching than during the professional year? Could it be that certain developmental concepts are more meaningful after a person has faced several groups of adolescents day after day for a whole year? Would the logic of instruction be more palatable after the individual has discovered that instruction is indeed a matter of defining, proving, opining, explaining? Would one come to realize that there are many strategies one may employ as he seeks to modify his pupils' behavior toward specific ends? Would task analysis come to imply a valuable process once the individual has discovered that his teaching needs direction and sequence if it is to change pupil behavior in desired ways and directions?

This internship approach will make it possible to experiment with a revised curriculum at two stages in the educational program—before and after a year of teaching. It also provides an opportunity for investigating a rather well integrated curriculum and of utilizing, more than is characteristically done, teams of specialists in developing the professional aspects of teacher education.

Phase III. Teaching in Secondary Schools

With the opening of the school year in September 1967, the interns will assume responsibility for a complete teaching assignment.* They will be expected to be members of the teaching staff, with all the duties that such a position implies. They can expect no special privileges, but this does not mean that they will not be given every help and assistance they need from the regular teachers. Indeed there could even be close co-operation between the two for their mutual benefit. For instance, some team teaching procedures could well develop in which the more and less experienced individuals jointly planned the instructional program. Such efforts would capitalize upon the greater experience of the one and, at the same time, provide appropriate and relevant intructional opportunities for the other. University supervisors would welcome such a development and would seek to benefit from it as well. However, whether or not such a program develops depends upon teachers in the co-operating schools. It is not an inherent part of this program.

During this year, which is regarded as a 'training' rather than an 'experience' period, the faculty of the University of Victoria will continue to carry on frequent supervision, keeping close watch on the intern's progress and providing continuing help with problems as they arise. Co-operating teachers who have participated in planning TIPS see the continued supervision and assistance by the University instructors in this first year of teaching as one of the decided advantages of the program. The interns, who in one sense are still regarded as students, may be willing to seek help from their instructors where regular first-year teachers might be loath to disclose weaknesses to their fellow teachers or immediate supervisors.

Supervision and assistance by the University will be given in this internship year in two ways. Faculty members will make regular visits to the classrooms to discuss the work being done and to offer suggestions. In addition, they will conduct Saturday morning seminars every two or three weeks at which time group assistance and instruction can be given. At these group meetings the interns will be able to learn about the problems of their fellows and compare them with their own. Such an opportunity to talk over difficulties and to get help in developing their instructional plans for the next few weeks should make an additional contribution to their professional development. Supervision and seminars are seen as the means by which the University can remain in close touch with the interns and maintain, at the same time, good working relationships with the members of the profession as they share in the preparation of teachers.

Phase IV. Summer Session (1968)

With the close of the school year the interns will register at the University for the six units still required for certification. The general pattern of instruction for this summer session, 1968, will be similar to that found in the preceding summer. Again the content will derive from educational history, philosophy, psychology, etc.; it will be related to the students' problems and concerns as they developed while they were teaching and will look beyond past practice to future possibilities.

This last phase will complete the sixteen-month program of TIPS making the instruction it provides comparable to that offered in the normal one-year program for graduates. Its activities and content will be similar to the latter but the sequence will vary. In addition, it will provide continued supervision in the crucial first year of teaching. The hope is that the interns will become not only skilled craftsmen in the classroom but also contributory, innovative members of the teaching profession. □

*The interns will receive 'Letters of Permission' from the Department to enable them to be employed in the co-operating school districts. They will be paid on the districts' PC salary scales. The Victoria, Sooke, Duncan, Lake Cowichan, Ladysmith, Nanaimo, Qualicum, Alberni, Courtenay and Campbell River school boards have each agreed to employ a limited number of interns.

CTF

an active reality

Pictured at the CTF Annual General Meeting in Edmonton in July are (left to right) Norman Goble, CTF Assistant Secretary; Miss Tess Sturgeon, CTF staff; Dr. Gerald Nason, CTF Secretary; Wesley Janzen, President; George MacIntosh, Past President; Wendelin Herle, First Vice-President; and Rev. J. Harold Conway, Second Vice-President. Mr. Herle is now CTF's President.

CANADIAN TEACHERS' FEDERATION

LA FÉDÉRATION CANADIENNE DES ENSEIGNANTS

ONE OF THE INTERESTING ANOMALIES of Canadian education is that the national teachers' organization, despite an active program at the national and international levels, is virtually unknown to most of the more than 150,000 teachers who are, indirectly, its members.

This really isn't surprising, however, for education in Canada is very much a provincial affair, under the terms of the British North America Act. Teachers associate themselves with their provincial teachers' organizations in protective and professional matters. However, the interests and responsibilities of the profession and of education cross provincial (and even national) boundaries in the twentieth century, and the provincial teachers' organizations long ago recognized this fact by joining together to form the Canadian Teachers' Federation. There are twelve affiliates: two in Quebec and one in each of the other provinces and the Northwest Territories. Teachers do not join CTF on an individual basis but are members through their membership in their provincial organizations.

Canada's national teachers' organization is a busy, active reality, recognized and respected at the international level, where it plays a prominent role in the activities of the 94-nation World Confederation of Organizations of the Teaching Profession (WCOTP). At the national level, CTF acts for teachers when federal government agencies must be contacted. CTF also serves as the voice of the teacher in such areas as national broadcasting. The views of the profession are expressed on a variety of matters through CTF and

Adapted from material prepared by Walter A. Sargent and supplied by the CTF Distribution Service.

close relationships are maintained with such national bodies as the Canadian National Commission for UNESCO, the Canadian School Trustees' Association and the Committee of Ministers of Education.

Like the provincial teachers' organizations which make up the national body, the Canadian Teachers' Federation takes a continuing interest in the professional competence of the teacher. It assembles and distributes information, and attempts to stimulate and encourage the professional programs of the provincial teachers' organizations.

The Canadian Teachers' Federation has its own research section and conducts educational research both independently and in co-operation with its affiliates. Among the publications of CTF are research material and information concerning seminars, workshops and conferences which are sponsored regularly by the national organization.

CTF acts in areas where the federal government participates directly in education. In matters concerning teachers in overseas schools operated by the Department of National Defence, in technical vocational programs operated under provincial-federal agreements and in areas dealing with External Aid programs, which send experienced teachers to developing countries, the Canadian Teachers' Federation speaks for teachers and acts to protect the rights of teachers. CTF also speaks on behalf of its affiliate, the Northwest Territories Teachers' Association, about matters concerning teachers in the Northwest Territories.

The program of the Canadian Teachers' Federation covers five major areas: (1) federal government representations and relations; (2) international activities and relations; (3) development of professional competence; (4) research and information; (5) liaison and co-operation with other national organizations.

Representations Are Made to Federal Government

CTF makes representations on legislation which affects teachers, either directly or indirectly. The national organization protested to federal authorities, for example, when legislation was proposed which would force teachers to pay unemployment insurance. Spokesmen pointed out the discriminatory nature of such a proposal. The legislation was not passed. CTF observed a constant vigilance on Parliament Hill when the Canada Pension Plan was being considered. The organization was successful in gaining permission to present briefs on the upcoming legislation. It then assisted affiliates with the preparation and presentation of regional briefs which pointed out to the Commons-Senate committee the feelings and, in some cases, fears of Canadian teachers regarding the proposed plan.

The Canadian Teachers' Federation serves as a source of advice and consultation for federal government programs which touch on education. These involve such things as technical vocational education, the national production of classroom films by the National Film Board, and nominations for government delegations to international meetings.

CTF Originated Project Africa

At the international level, CTF has gained much respect and influence for Canadian teachers. The national body marshals and co-ordinates the efforts of individual affiliates and also conducts international projects on behalf of all the affiliates. The best known and most successful program is Project Africa. Under this program, degree-holding, highly-qualified Canadian teachers conduct short courses each summer to help African teachers upgrade their qualifications. In this way, the profession serves in the area it knows best—teaching. The project is entirely a professional venture of Canadian teachers, conceived, administered and paid for by the profession.

Each Project Africa course is under the direction of the appropriate African national teachers' organization and on each staff, Canadian teachers work with African colleagues. The course director is always an African. Provincial affiliates pay the expenses of participants from their own province, and CTF administers and co-ordinates the program, conducts an orientation course and bears related expenses. The program was born in 1962, when two teachers participated, and has expanded rapidly. Last summer, 28 Canadians took part and, for the first time, CTF sent teachers to French-speaking Africa.

International Relationships Are Important

CTF also works to improve communications with teachers and education in Latin America. A special Spanish language newsletter is mailed in quantity to Latin American teachers' organizations and exchange visits by key teacher leaders of both cultures are encouraged. CTF has pressed the appropriate authorities to expand teacher exchange programs beyond the Commonwealth. The reference point for much of CTF's international program is the World Confederation of Organizations of the Teaching Profession. WCOTP represents about five million teachers in 94 countries. It will hold its annual Assembly in Vancouver in August 1967. CTF is active in WCOTP, not only because it believes the profession has a responsibility at the world-wide level, but also because it realizes that the status of teachers in other countries can have an effect on the status of Canadian teachers. WCOTP has as one of its prime purposes the raising of the status of the profession.

'The effect of lowering of status, or abrogation of any of the rights of the teacher in any country, has a direct effect on what people believe about the status of teachers,' George MacIntosh, then CTF President, declared in 1964. 'This effect is felt here at home by the teacher in the classroom. The protection of the rights of the teacher and the raising of the status of

the teacher anywhere, is the responsibility of every teacher and of every teachers' organization in Canada.'

The development of professional competence has a high priority with CTF. It assembles authentic information from national and international sources and makes this information accessible to Canadian teachers through its affiliates. Professional programs in the affiliates are stimulated by introductory seminars designed to present new educational ideas to affiliate representatives. These representatives can then pursue the application of these ideas to their own provinces through provincial programs. CTF also serves as a clearing house, so that the activities, thinking and decisions of the various affiliates are made known to other affiliates.

CTF Sponsors National Gatherings

Last May saw the Canadian Teachers' Federation sponsor a national seminar on teacher education and certification. This meeting in Ottawa attracted many experts in the field in addition to representatives of every provincial affiliate. A somewhat similar gathering in the fall of 1965 drew together experts and specialists in the field of education finance. Working papers, statistics and addresses delivered at these CTF gatherings are made available to all the affiliates and this often leads to further investigations and developments at the provincial level.

CTF operates its own research division, which performs fundamental research in such areas as education finance and learning theory. It conducts surveys of educational practices and teaching conditions with a view to defining trends and making comparisons. The CTF research section advises affiliates about their own research programs and other matters requiring consultation with specialized CTF research staff. Many requests for information and statistics on matters related to education are handled by CTF.

Many publications are printed for teachers, libraries and educational institutions in every part of Canada and other countries. Articles are prepared and distributed to teachers' magazines across Canada. In addition, CTF publishes a prize-winning newsletter monthly, September through June.

The Canadian Teachers' Federation maintains close liaison and co-operation with other national organizations to see that teachers' views are expressed whenever and wherever appropriate. Teacher welfare and the greater good of Canadian education are promoted in this manner. At present, CTF has close working relationships with such major national bodies as the Association of Universities and Colleges of Canada, the Canadian Education Association and the Canadian Council on Research for Education. The Canadian Teachers' Federation has taken the initiative in convening an annual meeting of the major national educational organizations to provide better liaison and co-ordination of effort wherever feasible.

CTF Was Formed in 1920

The Canadian Teachers' Federation was born in Calgary at a two-day meeting in July 1920, when a gathering called by teacher representatives to form a federation of the four western teachers' organizations was joined by two Ontario teachers. The groundwork had been laid at Winnipeg in October 1919.

During a conference there on character education and citizenship, Harry Charlesworth, secretary of the newly-formed B.C. Teachers' Federation, met E. K. Marshall, editor of the Manitoba Teachers' Society and soon-to-be first full-time secretary of that organization. The meeting in the Winnipeg YMCA was also attended by other teachers from Manitoba, Saskatchewan and Alberta. Charlesworth convinced the meeting of the value of a federation of the teacher organizations in the four western provinces. These delegates in turn sold the idea to the western organizations and the July 1920 organizational meeting was scheduled.

News of the planned federation traveled east and

The BCTF delegation to the 1966 Annual General Meeting of CTF included (left to right) D. J. S. Smith, R. G. Kaser, R. M. Buzza and J. H. Robertson. Behind Mr. Smith is Mrs. Isobel Cull, BCTF member of the CTF Board of Directors.

when Miss H. S. Arbuthnot and Charles C. Fraser of Toronto appeared at the Calgary meeting, the idea of a western federation was scrapped in favor of a national organization. Charlesworth was elected the first president, H. W. Huntley of Manitoba became vice-president and Miss Arbuthnot, secretary-treasurer.

The newly-formed provincial teachers' organizations across Canada were not strong in 1920 and were busy fighting their own similar but separate battles. They were fighting to become strong organizations and for recognition and welfare of teachers. It is surprising, therefore, and a credit to the profession, that the formation of the local and provincial associations was followed so soon afterward by the interprovincial and national movement.

Creation of the Canadian Teachers' Federation gave the profession a national voice for the first time. There were other national bodies interested in education but these were under the sponsorship and direction of those outside the profession. Whatever their value, these associations had no place in their sessions where teachers could discuss salary and tenure problems, or other matters related to working conditions.

The press, which generally took an anti-union stand, had some significant things to say about the formation of the Canadian Teachers' Federation. The Calgary *Albertan* reported, 'The organization of the teachers' federation of different provinces was forced upon the teaching profession because the public did not properly appreciate the services of the teachers.' Similar favorable sentiments were expressed by the press across the country.

Professional Aspects Were an Early Interest

In an era which saw a surplus of teachers, salary-cutting and short-notice dismissals, the national organization soon proved its value in protective matters. The exchange of information across provincial boundaries and co-operative efforts by teachers across these boundaries, helped considerably the fight of the profession for decent working conditions. Right from the beginning, however, CTF took an active interest in the professional aspects of education.

The interest of the Canadian Teachers' Federation in international affairs goes back to 1920, when Sir James H. Yoxall, secretary of the National Union of Teachers of England and Wales, was asked to address each affiliate during a forthcoming visit to North America. In 1923 CTF became affiliated with the World Federation of Education Associations. Importance continued to be attached to international relations. In 1925, 21 delegates, 12 alternates and nine participating representatives of CTF attended the Edinburgh Convention of the World Federation of Teachers. The WFEA met in Toronto in 1927.

In 1923 the Provincial Association of Protestant Teachers of Quebec and the Prince Edward Island Teachers' Federation had joined CTF. The New Brunswick Teachers' Association became part of the national organization in 1926 and the Nova Scotia Teachers' Association joined the following year. The CTF roster of provincial affiliates was almost complete by 1927. The first Annual Meeting in 1921 had delegates from the B.C. Teachers' Federation, the Alberta Teachers' Alliance, the Saskatchewan Teachers' Alliance, the Manitoba Teachers' Federation, the Federation of Women Teachers' Associations of Ontario, the Ontario Public School Men Teachers' Federation and the Ontario Secondary School Teachers' Federation.

The Ontario Teachers' Council joined in 1935 and took over representation for the three original Ontario affiliates. In 1944 the Ontario Teachers' Council became the Ontario Teachers' Federation, when it added to its list of affiliates the Ontario English Catholic Teachers' Association and l'Association d'Enseignement Francais de l'Ontario. Since 1944 OTF has represented all five Ontario organizations in CTF.

The Federation of English Speaking Catholic Teachers of Quebec joined the national body in 1945, the Newfoundland Teachers' Association joined in 1949 and the Northwest Territories Teachers' Association joined in 1965. The French-language Catholic teachers of Quebec are the only provincial teachers' organization not affiliated with CTF. Contact is maintained with CIC, however, and areas of co-operation are explored on a continuing basis.

AGM Determines CTF Policy

Every provincial affiliate is represented by a delegation at CTF's Annual General Meeting, which determines policy for the organization. The AGM is held in a different province each year. Each affiliate is also represented on the Board of Directors, which is appointed by the Annual General Meeting to manage the organization's affairs in accordance with policy established by the AGM. A small Executive consisting of Past President, President and three vice-presidents serves as a steering committee for the Board of Directors.

The headquarters of CTF is in Ottawa. The staff is responsible, through the Secretary-Treasurer, to the Board of Directors, for the day-to-day business of the organization. Several committees give intensive consideration to the various areas of the program, and serve in an advisory capacity to the Board. These committees deal with such areas as education finance, research, international relations and teaching practices.

The BCTF has always been a leading supporter of CTF. Six BCTF presidents have gone on to become presidents of the national organization, the most recent being Wes Janzen, vice-principal of Henry Bose Elementary School in Surrey, who was CTF president last year.

By their very nature, national organizations seem remote to their members. However, teachers can be sure that in CTF they have a strong voice in national and international matters affecting the teaching profession. □

HELP THEM SEE WHEN THEY LOOK

HELEN DAVEY

THE IMPORTANCE OF TRAINING in visual perception cannot be underestimated. For the child with problems in this area, retraining can be the solution to most, if not all, of his learning disorders. Conceptualization can occur only after the child has control over his sensory-motor being and over his perceptual processes. Often we, as teachers, by failing to understand that the nature of a child's problems may be perceptual, expect him to be able to use abilities he does not have and to build upon these an understanding of language and a capability for forming concepts. Indeed, the inabilities caused by poor visual perception occur in areas in which competence and readiness are necessary for all school learning.

The child who has problems in visual-motor co-ordination, besides appearing generally awkward and clumsy, will be unable to perform with any degree of accuracy such activities as cutting, drawing, pasting or writing. As a result of difficulties in figure-ground perception, he is not only unable to find similarities within wholes, to locate details, and to recognize that certain forms are letters, but also to find the correct place on a page in a reader or workbook and to find a word in a beginner's dictionary. Constant recognition of a form regardless of its size, position, color or texture is a difficult task for a child with problems in perceiving constancy of shape. Difficulties in recognizing position in space are evidenced by the child's making reversals of letters, of letter sequences, of words, or of number sequences, and by his lack of understanding of such spatial words as *in, out, below, above, up, down, front, back, left,* and *right*. Finally, the child with problems in discerning spatial relationships is unable to perceive correctly letter sequences within words and to copy patterns from pictures, pegboards, or block designs.

Before training in the specific areas of weakness of visual perception, general training must be done. Both Frostig and Kephart suggest large muscle exercises to increase awareness of the body in space. Many of these exercises are related to four of the specific areas of visual perception and can be used to lead into work more particularly suited to the separate area. For example, before small muscle training in visual-motor co-ordination can be attempted, exercises such as these suggested by Dr. Frostig should be used: catching and throwing bean-bags or balls of different sizes; jumping from crouched position to stretched position; duck walk (waddling in a crouched position with hands on hips); touching toes with legs stiff; crawling; skipping; walking forward and backward while crossing feet; balancing on tiptoes and on one foot; cat walking ('walking' on hands and knees with back alternately arching and falling); creative play (pretending to be a wind, a river, or a butterfly).

To these activities Kephart would add the following: walking board exercises (Walking forward, walking backward, walking sideways, and turning and bouncing on the board. These exercises can be done on a plank or on a bench either right-side-up or reversed.); balance board exercises (balancing on a square platform approximately 16" x 16" which is nailed through its center to a 3" high block of wood whose top and bottom surfaces are 3" x 5", 4" x 4", or 5" x 5", later bouncing a ball, catching a ball, and throwing objects, all while balanced on the board).

Any of these exercises can be done with a limited amount of equipment in physical education periods or in the classroom during little 'breaks' between activities. If more equipment is available, more activities are possible. Kephart, in his *The Slow Learner in the Classroom*, suggests, as well as the exercises I have mentioned, many others involving a trampoline. Certainly the importance of these physical activities in laying the groundwork for good visual-motor co-ordination, as well as that of other such exercises in initial training in other areas of visual perception, stresses the often unrecognized importance of physical

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Mrs. Davey, a teacher of special classes in Victoria, is currently studying in California for her Master's degree. In an article in our September-October issue, she dealt with the importance of locating children with problems of visual perception very early in their school life and told of tests a classroom teacher could administer. This article describes ways of helping such children with classroom exercises.

education to the elementary school child, the interrelationship between such education and the academic subjects, and the necessity for conscientiously observed physical education periods in the elementary school.

Training exercises of a general nature which may be done prior to specific exercises for figure-ground perception are fewer in number than those for use prior to specific training for visual-motor co-ordination. Frostig suggests for an 'in-the-classroom' activity the discriminating between various objects in the room. The children might look, for example, for all square things, all black things, all metal things or all smooth things. Kephart suggests that difficulties in figure-ground perception in the dimension of time may be corrected through rhythmic activities. Some of these activities include drum beating, first with one hand and then with both, and later with one hand and the opposite foot tapping.

General pre-training should also be given to children with difficulties in perceiving position in space. Two of the activities Dr. Frostig recommends here are the locating and counting of body parts and the following of such directional instructions as, 'go back' and 'go left.' Kephart again suggests the use of the walking board, this time with stress on the different directions of movement needed for the development of the laterality and directionality that are prerequisite for reading and writing.

Understanding of Space Can Be Increased

The fourth specific area of visual perception which should be approached only after the child has successfully performed general activities is the perception of spatial relationships. The child's own understanding of himself and the space he fills can be increased by having him cut out a life-size picture of himself which the teacher or another pupil has drawn while the child lay on a large piece of paper.

Other activities involving space orientation are crawling through barrels or hoops. If these materials are not available, crawling under desks or under chairs and tables may be substituted. Kephart suggests a modification of the game 'Angels in the Snow' in which the child lies on the floor and follows directions involving stiff arm and leg movements, both alone and in combinations.

For facilitating the understanding of such relative-space concepts as *big, small, short, tall, top* and *bottom,* modifications of some of Montessori's equipment may be used: a cylinder block made from a block of wood with fitted cylinders of different sizes, a tower built of blocks of graduated sizes, or a flight of stairs made from blocks similarly graduated in size. The colored Cuisenaire rods can also be used for the concepts of *big, bigger, smaller,* etc.

But in the main area of visual-perceptual retraining, that of the direct treatment of specific areas of weakness, the suggestions are practically unlimited. In addition to the techniques and materials to be mentioned here, many similar ones can be devised by the ingenious and creative teacher. Certainly for the five specific areas of visual-perception weakness — eye-motor co-ordination, figure-ground perception, position in space, constancy of shape and spatial relationships — the Frostig worksheets are excellent. If these are not available, however, modifications of them can be created and used in combination with other exercises. Many of the following activities are used by Frostig, Kephart, Laurence Peter, members of the Strauss school, members of the Haring and Phillips school, and the followers of Montessori and of Cruickshank.

For eye-motor co-ordination exercises such as these may be given: drawing lines on a blackboard with each hand and with both hands; drawing lines within limits, both on paper and on the blackboard; drawing many lines in all directions from a central point and from many points to a central one; following dotted lines to make a picture (Haring and Phillips recommend this.); connecting dots to make a picture; threading wool, string, or thread on spools; cutting fringes, geometric forms, and simple pictures; pasting forms on pictures that contain these forms; tracing; coloring; finger tracing on sandpaper, in sand, or on paper (Fernald recommends this method, which can be modified for use in spelling and reading.); drawing parallel lines; solving mazes; sequencing beads; sequencing pictures that make up a series; matching and sorting paper forms; solving jig-saw puzzles. (Simple puzzles can be teacher-made easily by pasting the chosen picture on cardboard and cutting it into a very few pieces.)

Exercises Help Figure-Ground Perception

Exercises to train children with weaknesses in figure-ground perception include: locating details in pictures (These pictures may relate to reading, social studies, science, health, etc.); finding similarities within wholes in art or design; sighting specific items in scenery; solving mazes with overpatterns (For older children map-reading skills such as following rivers, highways, or borders can be used.); reading with the aid of color cues for specific sounds in words and with stippled silent letters; completing pictures in which only a sample of the full picture is shown.

For a child with a specific weakness in the area of constancy of shape or perceptual constancy, the following activities may be used: finding similar shapes (such as round shapes) within drawings or pictures (Again these pictures may relate to any subject.); recognizing similar shapes in words: endings, roots, or blends; recognizing forms of letters in cursive and manuscript writing; locating numbers in 'number-people' (people drawn using a number for each part of the person); counting objects when some are visible and others are partly hidden; selecting all similar or different sized

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C. B. KOTAK and W. P. GODDARD

computers in the classroom

THERE IS ALREADY A substantial quantity of literature dealing with computers in education and so, after a very cursory general discussion of educational uses of digital computers, we shall present our own observations and experiences in the B.C. classroom.

We in B.C. are certainly not explorers, but rather are frontiersmen in computer-education. There are already computers in classrooms in the U.S.A. A number of texts for secondary schools have been prepared and are in use in regular teaching. To date, however, there have been no computers installed in regular B.C. classrooms (i.e., other than at technical schools and the University) apart from that which was installed in North Vancouver School District and then in Burnaby and Vancouver School Districts. It is our experiences, then, with these computers with which we shall deal.

The computer was used by regular classes during the day and by teachers at night. (Courses for educators were made available for those in Burnaby, Coquitlam, Delta, North Vancouver, New Westminster, Richmond, Surrey, Vancouver and West Vancouver.)

Certainly the advent of classroom computers in the province is inevitable—indeed the mathematics, science or commerce teacher without a knowledge of computers will soon become an anachronism.

Whether or not a student ever works on computers in his chosen vocation, he will utilize them indirectly. From atomic research to accounting, in fish canneries and logging operations, for executive decision-making and medical diagnosis, the computer is here to stay.

Students in our province should be prepared for these things now, as students in other parts of the continent have been for a number of years. The computer relates to every secondary student. All levels of students require some form of computer-orientation. The vocational student should understand the mechanics of operating a pre-programmed machine, the technical student must be able to teach the computer to do complex computations, and the academic student will use the large computers of universities to analyse theoretical questions. Future executives who will never program a computer will need to understand the process so that they can use required data and frame questions suitable for a machine to handle. All students must learn the discipline of thought required by computers—a mode of thought which has always been practised by scholars has now become a necessity for everyone. The large volume of material now taught in the secondary school necessitates some time-saving. One way this time is saved by the computer is in eliminating repetition of those easily mastered mechanical processes which must be used again and again in solving more difficult *concept-forming problems.*

If some fear a loss of skill with the mechanical processes, our experience has shown an opposite trend.

Mr. Kotak taught at Handsworth Jr. Secondary School, North Vancouver, and Mr. Goddard at Sentinel Secondary School, West Vancouver, when this article was prepared earlier this year.

Pupils and teachers work with a computer in school. From left to right are Mr. Goddard, Ann Davis, Sue Rathbone, Heather Fawcett, Mr. George Melnychuk of Monroe International, Brent Kerr and Mr. Kotak.

A student is incapable of using even the most elementary process on a computer unless he understands its 'long-hand' operation thoroughly. In fact, the 'flow chart' method of reasoning, and the techniques of problem solving by analogy and discovery, which have always been desirable, now become essential. The rigor demanded by the machine is complete as there are only two sorts of answers recognized—right and wrong. The machine accepts what is logical and rejects (with an explanation) all else.

The computer mathematics demands a structured approach. Concepts of numbers, numerals, open and closed sets, are reinforced so that even the Grade 8 student sees the immediate necessity for these ideas from the 'new math.'

One might wonder, with an already crowded curriculum, how this new 'subject' can be squeezed in. Yet, we found that only a few hours of formal 'computer instruction' need be given. (Obviously we are not discussing the future specialist, but rather the general student in regular secondary school mathematics, science, industrial arts and commerce classes.) Other instruction can be given as the regular course progresses. And there is time—for the students learn the regular subject material so much faster—as, with one computer program, he solves many equations, predicts many experiments, and writes many ledger pages.

Before giving specific details of the student's reaction to his encounter with the machine, let us just briefly discuss the feasibility of the classroom-computer.

The miniaturization of computer components has reduced both the size and cost of these machines enough to make them accessible to the average school for use in existing classrooms. It is now possible to have a computer, the size of a teacher's desk, which can be rolled from room to room, which plugs into any standard electrical outlet, and which requires no air conditioning or other auxilliary equipment. Such a machine, which has the same logical abilities as larger computers, costs the same amount as half a teacher a year, and (for a school of 40 teachers) costs less than 1% of the total annual payroll for all personnel in the school. (This is calculated on the basis of the machine's lasting six years, although in fact it may be expected to last very much longer.)

Now we return to our impressions. We were most impressed by that sense of wonder which the students regained—a sense so easily destroyed by tedious repitition. The student, having solved a problem, often wonders 'what would have happened if we had done this, or that'—and seated at the computer, he can find his answer—an answer which he might not seek if it meant hours of dull calculation.

We took classes of students from Grades 8 through 12 (from all programs of study) to the computer, and found no difficulty in having them, within 2½ hours, design elementary programs and solve problems with direct application to their current courses. Some of this enthusiasm was generated by the novelty of working with these fascinating machines, but even now, six months since the machine was available to them, the students suggest computer techniques for solving problems in current school work. On their own they have even continued to design programs for computers, in spite of the fact that they know they are unlikely to have immediate access to a machine.

A few cases in point may well illustrate the quality of thinking observed during the time the computer

was in the classroom. The students took an equation from the regular Grade 10 mathematics book and taught it to the computer. They then asked the computer to use the formula to solve various problems and were amazed to find that the computer detected a flaw in the formula under certain circumstances. This led the students to investigate these circumstances further and find out for themselves a great deal about numbers. Not only was there a detectable increase in knowledge derived from this experience, but also an obvious improvement in attitude. Formulae were no longer merely routines for these students—they became meaningful expressions of deep significance.

One student, whose hobby was electronics, produced, after school, a table of 2160 operating frequencies for various types of crystal, involving several mathematical operations for the calculation of each frequency. A 'long-hand' calculation would have taken approximately 128 hours, yet this boy completed the job in less than two hours.

A Grade 9 student (of apparently less than average scholastic ability) was given the task of approximating square roots. He had almost given up this repetitive task but, upon understanding the process thoroughly, he decided to teach the computer the routine and, as a result, was encouraged to solve many more problems.

Students in our Grade 12 physics normally take only six to eight readings in their experiment to calculate the earth's 'g' with a pendulum. As a result they sometimes get rather unsatisfactory results. One student, with access to the computer, took 25 readings, and was able to make a very pleasing graph with the increased number of computations done by the machine in the time saved from the usual long time on the slide rule. This boy did a better lab in less time and gained skill and experience in two fields by writing the computer program.

Grade 8 students were able to experiment with a complex addition series (impractical to study by 'long-hand' methods) and became so curious about this series, its discoverer, and number theory in general, that they were driven to the library to learn more. The reports written by some members of the class showed new insights into not only mathematics, but also history and philosophy.

These have been only a few subjective results of the brief time we worked in the classroom with the computer. More results will soon become apparent.

There are now more than 300 educators in the province who have shown enough interest to give up three hours an evening to begin to prepare themselves for the task ahead.

Eight school boards and a computer manufacturer (Monroe International), mutually interested in the computer's role specifically in the classroom, supplied all facilities for these courses.

About 600 regular B.C. high school students have had 'hands-on' time with the computer. Our experiences certainly indicate the desirability of extending the benefits of the classroom computer to every secondary school student in the province.

All educators need to strive very hard to bring these new teaching aids into our classroom, to equip the student of today for the world of tomorrow. □

Instruction in computing is now part of the curriculum of the school near London that these boys attend. They are at work on an Elliott 903 computer. British educators have found that 11-year-olds find the principles of computer programming easier to understand than algebra.

THE SPECIAL CLASS TEACHER

ERIC HAMPSON

IT IS THE RIGHT AND PRIVILEGE of every child in our society to receive the type and the level of education from which he will derive the most benefit. Essentially there must be a compromise, for it is clearly impossible to plan for each individual to the extent that is implied in this statement. Fortunately, however, there are certain basic skills which form the core of every child's curriculum. Additional areas of study may be added as the student acquires the intellectual tools for the appreciation of his cultural heritage.

The child who is backward has rights and privileges similar to those of the normal and gifted, although he may never learn as much or produce intellectually and economically as much as the more fortunate child. He makes more demands on his teachers, who may feel that the returns for their efforts are pitiful; and, more often than not, the full range of welfare agencies must be enlisted for his sake. Because of the difficulties he experiences in learning, his teachers must be particularly competent. At the secondary level, they must be capable and enthusiastic in subjects other than the fundamental skills, for only in this way can they broaden the experience of the underprivileged student. If these teachers have a specialty, it is in mental hygiene. I implied the need for such an emphasis in last month's article, where I stated that three-fourths of the students in special classes exhibit some degree of emotional disturbance.

To offer the retarded child an education any less comprehensive than the one implicit in the foregoing paragraphs is to cheat him; to offer him teachers who are less than able in instructional method and human understanding is to be hypocritical. It is the more unfortunate, therefore, that special education has sometimes come to be regarded as a questionable haven for the incompetent teacher, the misfit, and the self-seeker, for it is, as well, the chosen work of those who believe in what they are doing. The influence of the ineffective teacher spreads across the entire spectrum of special education, and 'retarded' becomes a term of abuse for students and one almost of reproach for those who teach the less fortunate.

Few teachers in special education are there because a principal has had them shunted onto a professional siding; they are not there because they have found the gradient of promotion too steep. Most special class teachers are there because that is where they want to be.

Special education will be accorded parity of esteem only through the quality of those engaged in the work. In short, the teacher lends or denies dignity to the teaching. Quality in a human being embraces character, temperament, intelligence and performance. Good character is difficult to define; it is largely a function of the culture of a particular society, and every teacher should exemplify what Matthew Arnold, in *Culture and Anarchy,* has called 'the best that is known and thought in the world.' Intelligence and performance are more susceptible of definition, and the special class teacher should be selected from the most able. Temperament is linked with character and intelligence, but its nature requires further examination.

Patience, concern, confidence, faith and humility—do these represent a desirable temperament? They cannot be divorced from work with the handicapped. There are times when exploitation or neglect can be overcome only with anger and impatience directed toward those who would abuse the retarded. Trials of the spirit are legion in special education, for no

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Mr. Hampson, of Vancouver Technical Secondary School, is a teacher of a senior special class. Last month he wrote an article about teaching retarded children.

teacher is likely to escape disparagement of his efforts, or a disturbed student's display of hostility. There are days when five beautifully-wrought lessons are worth so much chaff, and others when one's own confidence is all but destroyed. Restraint, objectivity, and the ability to be concerned about, *but never too involved in*, the problems of other families are the qualities demanded.

There should be little recourse to the administration, for the essence of the education of the retarded is a personal relationship between the student and his teacher for the greater part of the day. In this context, the teacher is counsellor as well; and to apply to the administration, except for advice, is to shelve responsibility and to destroy rapport.

The academic and professional preparation for teaching in special classes in B.C. is well conceived. The Bachelor of Education degree with the appropriate major subjects is designed to make teachers aware of the several physical and sensory handicaps they will encounter. The degree is in the elementary field; but teachers who seek the basic qualification for work in secondary schools may take an additional year of study in courses that have particular reference to the education of those variously handicapped students who remain on the roll beyond the statutory leaving age. The provision of teachers who are adequately qualified, professionally and emotionally, to work with these young people is a matter of urgency. (I am not here referring to the highly-specialized techniques employed in the education of the blind and of the deaf.)

Teachers Must Have a Personal Philosophy

It is essential that all special class teachers have a personal philosophy that will prompt them to work realistically in the best interests of their students. In the elementary school the fundamental aim is fairly obvious—to help the pupils to acquire that degree of skill in the basic subjects of which they are capable. This work should continue throughout the secondary school, but here must be added a new dimension. Students who remain in special classes until they are 18, 19 or 20 years old frequently complain that they are asked to repeat, without variation, courses and assignments set at earlier stages. The work becomes soulless and dull, for it should be admitted that there is a limit to a teacher's ingenuity and to the students' mastery of the basic skills. At this stage, the aim should be to broaden the students' experience, and this means more than merely adding metalwork to woodwork or foods to needlework. It means more than talking about the United States and forgetting Canada, or preaching to youth the morality imposed on us by our parents.

The special class student will rarely be competitive as a carpenter or as a metalworker. By all means let him have the experience of working in various media, but do not lead him to believe that employers are clamoring for his services. It is a hard fact of life that the special class student will more often meet rejection than acceptance in seeking employment. In many ways he should be prepared for a life in which there will be much enforced leisure, because there is no work for him, and but a narrow field in which he is employable.

It is easy for teachers to become cynical about the future of retarded students, but this form of defeatism helps no one. These young men and women have as much right as anyone else to escape the demoralizing influences of Skid Road, which, unfortunately, they are too often conditioned by circumstances to regard as their fate. A knowledge of industrial relations and labor economics will often assist the teacher-counsellor in any appreciation of the field of employment.

Similarly, once it is established that a limit has been reached in the basic skills, the curriculum, particularly in English and social studies, should embrace the cultural aspects of the former and contemporary aspects of the latter course. The need for a survey of current affairs is obvious when it is realized that these students will be voters and tax-payers, but the very idea of poetry and prose appreciation may appear to be unrealistic. I can rely only on my own experience, which has convinced me that enthusiasm for literature does communicate itself to people of all levels of education.

Special Class Pupils Can Appreciate Poetry

If the students cannot read sufficiently well, they can listen, and at home they can often see television programs based on famous stories. The more capable will begin to appreciate the beautiful economy of the poetic statement and, by contrast, the tawdriness of much of the reading matter on the bookstalls. They will not stop browsing in sensational novels and magazines; nor will they invariably speak with perfect syntax; but they will know what is good and what is cheap. A few may be given a means of spending their leisure hours happily and creatively.

Science, too, has a place in the special class, but it should be the science of everyday things, not that of the specialist. It should embrace the elementary application of principles rather than the principles as such. The course should allow instruction in hygiene, elementary physiology and sex. Much will depend on the environment of the school and the aptitudes of the teachers; special class students ask questions on reproduction, marriage, venereal disease, and personal relationships. Until these topics become a recognized part of the curriculum, teachers, in their capacity as counsellors, should seek the consent of parents and of the administration before discussing them, but the young person of 16 or more can see through evasion, and the teacher who practises it will earn only the contempt of his class. It is also a fact that a youth will sometimes more readily approach a teacher of the opposite sex for advice on these matters. Thus, it is

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BALLAD OF OUTER SPACE

Seal the ports, undamp the pile
Let the reactor foam
And up ship! Lift ship!
For we are going home.

Our tiny ships are ready now
As ever they will be.
The crews are set, the piles are hot,
The countdown's gone to three.

The count is blast and ten ships lift
On radioactive fire.
Our ship's steel groans a human moan
As the jet thrust blasts us higher.

Nine space-ships have made their lift
And are setting course for home
But twenty men the dark of space
Eternally will roam.

The lust for wealth and an easy life
Has torn men from their world—
Desire, and greed and an alien call
Men into space has hurled.

Now we know the value of
That fertile, sandy loam;
Of fresh green hills and windswept skies
So we are going home.

The intercom gives a sudden buzz;
The captain's voice sounds struck:
'Jolm, you're piler aboard this ship—
The carbon damps are stuck.'

Nineteen men depend on the pile
Yet to fix it means my life;
But I think of the twenty men who died
And I think of Jean, my wife.

'I'm coming, Captain,' I say aloud.
I jump down to the deck.
A minute later I stand by the pile
To make my final check.

The carbon rods are stuck, all right,
And I need magician's tricks
But I get the rods controlled again
And the pile damps are fixed.

I stand by the pile and shut from view
The throbbing grey bulkhead.
I think of wind in forest pines
And flaming sunsets red.

I think of deer in bounding flight,
Of waving meadow grass
I think of cleansing scented wind
I think of a mountain pass.

The radiation's like sunshine's warmth
It pierces to my bone
The pile is fixed but I am dead
And I have died for home.

I shut my eyes and think again
Of clear and sudden dawns
Of troutlets darting in crystal streams
Of shy and startled fawns.

I feel a horse beneath me now,
The reins are in my hand
Casey neighs and I see some strays
Roamed from pasture land.

The wind's up fresh, the thunderheads roll
I feel the first sharp rain.
I smell northern air in every breath
And I am home again.

GILLIAN ARSENAULT

Editor's Note: Although it is not the policy of the magazine to publish poetry, the editors were much impressed by this poem, sent to them by Mrs. Flora B. Snowdon, teacher of English at George Elliot Secondary School, Winfield. In her covering letter, Mrs. Snowdon wrote: 'Occasionally something better than ordinary comes as a result of work done in an English class, and then the stars sing and the jaded teacher claps hands. I thought you might be able to find a place for the enclosed poem written by a Grade 9 fourteen-year-old. Obvious influences are Coleridge's Ancient Mariner *and an independent reading of* Lays of Ancient Rome. *But the poem stands on its own—excuse me, I wasn't looking where I was going—feet, and has great timeliness. Its authorship by a girl is interesting.'*

PRESCRIPTIVE TEACHING

An In-service Program for Teachers

L. J. PETER

THE STORY IS WELL KNOWN of a teacher, Anne Sullivan, who went to Alabama many years ago and established communication with the mind of a blind and deaf child, Helen Keller. Those of us who work in schools are familiar with less well-known examples of teachers who have accomplished outstanding results with children experiencing a wide range of difficulties. We have seen the seriously handicapped child, when given a skilled teacher with an effective approach, make significant progress. Teachers working with hostile, withdrawn, or insecure children have helped them find appropriate activities, acceptable expression of feelings, and opportunities to learn their real strengths and adequacies. Children from extremely deprived social situations, or with severe physical or emotional disabilities have learned to overcome these or their handicapping consequences.

It is evident that teachers who have appropriate intuitions about children can be highly effective in a remedial program. A teacher who is sensitive to the child's special needs and who has the requisite teaching skills can provide a beneficial program. The teacher who has developed superior understanding of the child in the educative process can be wise in making decisions regarding the educational therapy provided. How do teachers acquire these intuitions, sensitivities, understandings and skills? Most of the attempts to improve or increase these qualities have met with quite limited success. Let us look for a moment at these attempts to improve quality of teaching for handicapped or disadvantaged children.

Teacher-training institutions provide a number of courses in educational psychology, child development, and mental health. The relationship between proficiency in or grades achieved in these courses and improved ability in working with children has never been reliably established. It is not unusual to find teachers of outstanding competence, who have not had the benefit of these courses, working with handicapped and disturbed children and conversely many teachers who have had these courses show a lack of the desirable personal qualities, insights, and understandings. Later we shall examine some of the reasons for the ineffectiveness of such courses.

Another solution is to provide practising teachers with various kinds of consultants. In most communities the child can be referred to a variety of diagnostic and treatment resources, such as hospitals, mental

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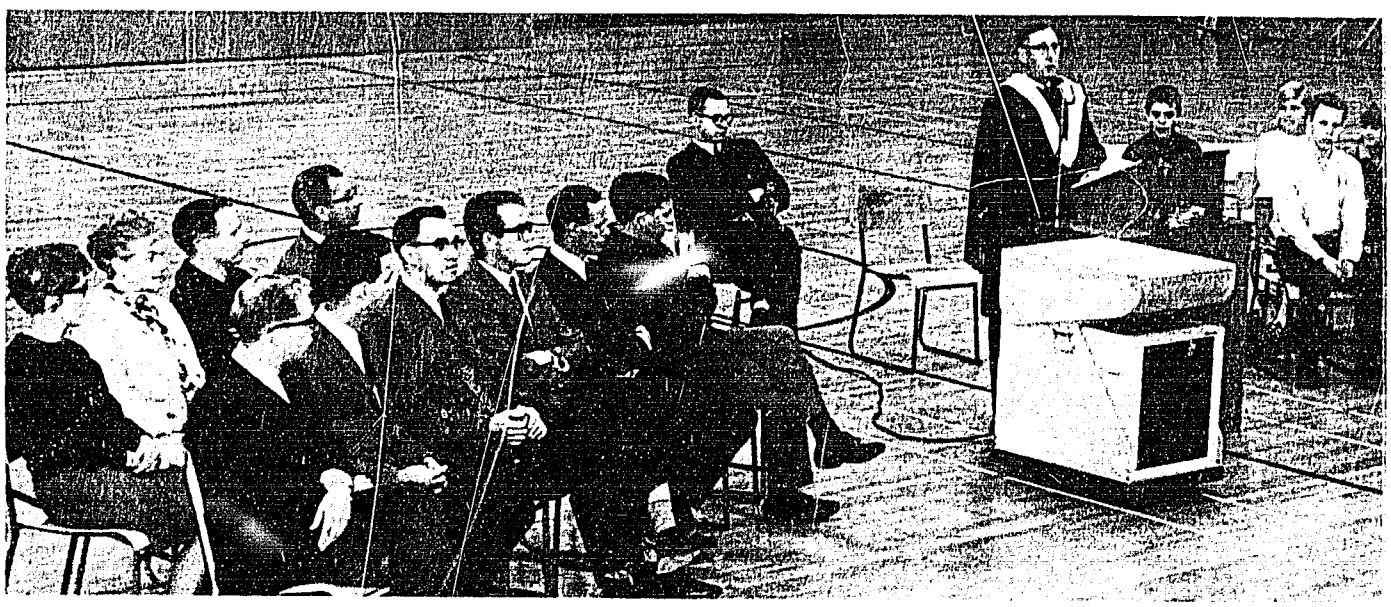
Dr. Peter, a member of the UBC Faculty of Education, has written for this journal previously.



OUR SCHOOL GOVERNMENT for the last six years has been modeled as closely as possible after the Government of Canada. We have a House of Commons composed of elected representatives of the student body, five for each grade. The Governor-General is the principal of the school, Mr. James Smith, and the Senate is composed of teachers.

Our government deviates from the Canadian government in that we do not have a party system. This has been a much-discussed issue in the House of Commons, but it is generally thought that there is not enough student support of the government to make it possible to form a governing party and an opposition party. Because of this, our Prime Minister is a nominee of the House of Commons, but a school-wide election for the position is held following a week of campaigning. The Prime Minister then gives a Speech from the Throne, and appoints his Cabinet. Cabinet Ministers do not have to be members of the House but can be any of the student body. Each Cabinet post is sponsored by a staff member, who is given the title of Deputy Minister.

The writer was a member of the Mount Elizabeth Secondary School Parliament in 1965-66.

The Ministries of our government are, of course, very different from those of the Canadian government. We have Ministries of Sports, Social Affairs, Junior Affairs, Finance and Communications, as well as an Attorney-General. The Attorney-General serves mainly as a middleman between the school's prefect system and the Government.

The 1964-65 government undertook the difficult job of writing a constitution. It took a long time to write, for there was much uncertainty about what it should contain. We therefore believe that its acceptance was a big step forward for the government. The government of 1965-66 passed a Crest Bill, which would be a parallel to the Canadian government's Flag Bill.

The government has several other pieces of major legislation: a Uniform Replacement Bill, which provides the school's teams with new uniforms on a rotational basis; a Dance Bill, which specifies conduct and rules at dances; a Clubs and Activities Bill and a Defunct Clubs Bill, which control organizations within the school; a Communications Bill and, of course, an Annual Budget. There are also a School Bank and a School Store, run by the government.

House of Commons meetings are run according to parliamentary procedures. A Speaker is elected and

KITIMAT HAS A STUDENT PARLIAMENT

SUSAN HAMBERG

he appoints a Sergeant-at-Arms. Minutes are kept of all House meetings and a Hansard, kept in the library, contains official copies of all legislation. Perhaps our meetings are more informal than those of the Canadian House of Commons, but we, too, employ rousing rounds of 'desk-thumping' and the occasional cry of 'Mr. Speaker, I object.'

We think our school has undertaken a very meaningful and educational task in trying to establish a school government based on the one at Ottawa. Our idea of government has occasioned considerable surprise and interest when we have sent delegates to Student Council Conferences, and we hope we have influenced other schools to try it. We believe we have established a 'first' in systems of school government. We have also had a 'first' over the Canadian Government: in 1964-65 our school had a female Prime Minister. Not only that, but both candidates for the post of Prime Minister were girls. Ottawa Take Note!

We believed that in our school there was much apathy on the part of the students not only toward the school, but also toward the country, so our government in 1965-66 introduced a National Identity Week. During noon-hours of that week the government was host to five speakers who presented opinions on such various subjects concerning Canada as Is there a Canadian Culture?, Foreign Ownership in Canada, and Youth's Responsibilities in Canada. In presenting these talks, the government hoped to interest the students in their country and to bring about discussion and new ideas.

Perhaps a major reason for introducing this system of school government was to allow greater participation in the running of school affairs by a greater number of students. And the students taking part in the government have certainly learned a great deal about government, the intricacies of procedures and the headaches and rewards of leadership.

Our government has now completed most of the major legislation necessary for the efficient operation of the government and we are now at a crossroads. From now on, the affairs of the government can quite easily be run by the Cabinet alone. But to allow the government to be controlled from the Cabinet will simply be a reversion to the old system of Student Council. We must now seek to develop the House of Commons, and thus the school government, into a useful group of people working to make our school life one filled with harmony, spirit, pride and fun, as well as education. □

Prescriptive Teaching

Continued from page 71

hygiene and child guidance clinics, social agencies and other services. The advent of psychological evaluation the refinement of medical diagnostic techniques, and the social welfare and rehabilitation movement have all contributed to our understanding of the individual child. As a result the interdisciplinary team concept has become the ideal of consultation. As schools have become more aware of ancillary services, children are referred with increasing frequency. These services are essentially roads away from education and into other fields. A child presenting problems is referred by the teacher to the school administration, then to the school counsellor, the school psychologist, school social worker, school nurse, child guidance clinic, social agency, or psychiatric clinic. The resources vary, but the movement is always out or away from the classroom. The road back, so that medical, psychological and social work diagnoses are implemented in the classroom, has been frequently missing. What is the reason for difficulty in establishing a useful relationship between the interdisciplinary diagnosis and teaching?

Telling Does Not Communicate Skill

How does one acquire understanding and comprehension? Educators believe, and extensive research and experience supports, that didactic methods[3] are comparatively ineffective means for facilitating understanding. Telling a person about a principle or generalization, no matter how eloquent the telling is, does not necessarily communicate the skill and attitude required for effective implementation of a principle or generalization.

A psychiatric social worker explained to a teacher that a disturbed child in a clinical setting had, after being abusive toward the worker, broken windows in the building. The worker explained that this showed the severity of the child's disturbance. He also suggested that this behavior was necessary as a release of the child's hostility. Although appropriate to the worker's frame of reference, to the teacher this was unacceptable. The teacher could not accept that the child's abuse of persons in authority or the destruction of public property was desirable. The specifics dealing with appropriate means of expression for the child would have been more useful.

To the therapist the child's expression of hostility and anxiety may be regarded as cathartic, but to the teacher the same behavior may seem to be reinforced. Both ideas may be valid. The child expressing hostility and anxiety in the clinic, perceived by the child as a treatment situation, may be releasing his negative emotions. The child expressing these same feelings in school, which he perceives as a learning situation, to a teacher, whom he perceives as an authority person, may be reinforcing his hostility and anxiety.

It is not uncommon to find advocates of psychonalytic, permissive, and structured approaches each claiming that their theory is the right one because, when their particular approach is consistently applied, positive results occur. On the basis of experience, observation and examples, the teacher can form his own generalization, which might include the importance of consistency of approach in working with disturbed children. He might be much less concerned about which approach is 'right' and more concerned with the consistency of approach because a fluctuating approach will reinforce the child's insecurity.

Communication from other professions to teaching is impeded by another aspect of the didactic methods employed by consultants who attempt to convince by stressing the importance of their own principles or beliefs. It might be assumed that experimental facts, which can be repeatedly tested and checked, would take precedence over broader and vaguer psychological speculation. This is usually not the case. Various elaborate personality theories which are important to the particular consultants involved are advanced as explanations for the behavior under study. The cause of contemporary behavior abnormalities is usually explained in terms of personality deviation resulting from past experiences. The teacher may find himself primarily interested in present behavior and the environmental modifications which facilitate more complete functioning of the child. He may even show a lack of interest in the experts' arguments about which factors were important in the irreversible past. The teacher may find it more consistent with his function to be concerned more with contemporary solutions than with etiologies.

Teachers Need Their Own Understandings

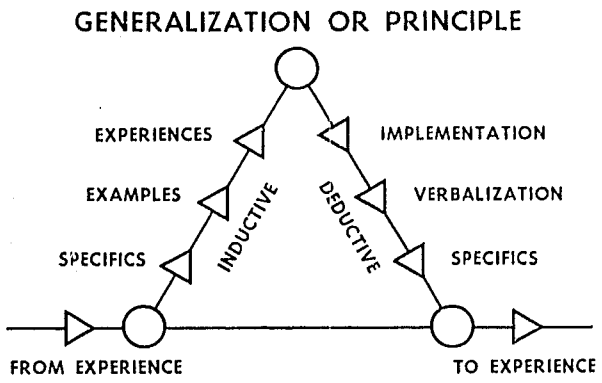
Another problem involved in the communication of principles and generalizations about children to teachers is that it has never been reliably established that generalizations appropriate for psychologists, psychiatrists, and social workers are appropriate for teachers. In other words, even if it were possible for the generalizations of the learning theorist, personality theorist, and case worker to be adequately communicated to and adopted by the teacher, the question still remains, 'Would he be a better teacher?' It is probable that the teacher needs his own generalizations and understandings appropriate to his own particular function just as the other professions need their theoretical frameworks and principles upon which to base their practices.

How are meaningful and useful generalizations developed? In education it has been found that teaching the principle before the student has had appropriate experiences upon which to generalize is not only ineffective but also detrimental. The teaching of the deductive process before the inductive process, can result in ritualistic behavior and verbalizations which do not reflect internalization or understanding.

The full potential of courses and consultation has

not been realized. They have avoided the inductive process through assuming that the process is unnecessary, by assuming that it has occurred or by assuming that the generalizations developed by the clinical professions are appropriate for teachers. As a result, the proliferation of courses and consultants may not further the development of teacher insight. Programs providing structure in which inductive process is fostered will have a much higher probability of success.

Educators have known for some time the effective means for providing development of understanding of their students at all levels and it appears that the same means are effective in facilitating teacher understanding. This is illustrated in the diagram of the inductive-deductive process.



The learner must have ample experiences, facts and examples from which to induce the generalizing principles underlying the specifics he experiences. As he induces these generalizations they influence future experience. As principles take form they can be implemented through the deductive process in moving from the general to the specific.

A generalization becomes meaningful after successful experience, completion, or closure. It is then that the explanation of the consultant can form a meaningful integration.

Too often it is assumed that the teacher's experience has provided a basis for inducting appropriate generalizations, whereas, in practice, it is common to have the teacher admit that everything tried with this child fails to produce desirable results. On the basis of this kind of experience the teacher is not ready to induce or internalize effective generalizations. An in-service program based on consultation is more appropriately based on directing the teacher to specifics, facts, and examples rather than to principles and theoretical frameworks. Without experiences with successful solutions to learning problems of handicapped children, the teacher is not ready to improve insight, intuition, and understanding.

The pre-training of teachers is even more vulnerable to this defect. Much is dependent on a teacher-pupil relationship, but teacher-training and practice-teaching seldom provide opportunities for this. Child development becomes meaningful when the teacher's understanding of a child grows through a relationship existing over an extended period of time. Many teachers have not worked through their own attitudinal problems which block implementation of principles of child psychology and learning to which they think they are committed at the time they receive their credentials. Teachers need an opportunity for the kind of systematic consultation which is characteristic of the clinical professions. In the pre-training course work in colleges of education as presently constituted, this would be a difficult task.

In the in-service aspects of consultation, a program based on sound educational practices involving the inductive-deductive process can be implemented. A program which facilitates therapeutic education through increased teacher understanding and competence provides the teacher with appropriate specifics and examples and contributes to the inductive process. A program I have developed which meets these criteria is called Prescriptive Teaching.

Program Provides Feedback to Teacher

Prescriptive Teaching is an approach to educational therapy which deals with the means of achieving sound educational goals for disturbed or handicapped children. It employs educational means to accomplish therapeutic aims. It achieves this through employment of interdisciplinary diagnosis which is translated into educational implementation. The educational relevance of the handicap determines the appropriate modifications of the specifics of the educational program. Criteria for remediation are established so that the teacher will be aware of the effectiveness of the educational modifications.

By providing these educational specifics, based upon the individual diagnosis, the teacher has increased opportunity to induce principles appropriate to his educational function.

The Prescriptive Teaching program is based upon a circuit which provides feedback to the teacher, which reinforces or supports those intuitions and understandings which are related to successful remediation of the child's problems.

By providing the teacher with the educational specifics and by providing the feedback mechanism whereby reinforcing consequences become attached to effective applications, the Prescriptive Teaching program facilitates development of desirable teacher characteristics. Appropriate understandings, generalizations and intuition are reinforced.

By providing a rationale and methodology based upon the educationally sound inductive-deductive process, Prescriptive Teaching (See *Prescriptive Teaching*, by L. J. Peter, published by McGraw-Hill, 1965) resolves many problems related to educational implementation and affords a positive ongoing in-service program. □

IN SWEDEN THE STUDENT IS KING

R. W. SCALES

The author, Director of Adult Education for School District No. 28 (Quesnel), was one of six business and professional men from B.C. and Washington who toured Sweden last summer as part of the Rotary Group Study Exchange Team. This article resulted from that part of the study program which dealt with Swedish education.

SWEDEN IS WELL KNOWN AS THE Welfare State with cradle-to-grave security. Over a period of thirty years in power socialist governments have produced legislation that is designed to enable the individual to enjoy a life free of the worries of poverty through sickness or illness, unemployment or disablement. For children there are massive doses of legislation to ensure they are healthy, have access to education and to vocations and a secure future.

Education in the elementary schools in Sweden continues for nine years, broken into three three-year periods—primary, intermediate and junior secondary. The program of studies very closely resembles our own, with the exception of the introduction of English as a required foreign language at the fifth grade level. It is continued as an eight-year compulsory course. As a result, few young people don't speak excellent English.

There are no guidance classes at the elementary level, but a nine-year-old in the second grade (children start school at age 7) begins a course in sex education that continues into the secondary schools. This program is primarily of a biological nature, explaining with the use of realistic charts and diagrams what puberty is and how a baby is conceived and born. Other topics include menstruation and social diseases, and the responsibilities of both partners in a marriage. Boys and girls are not separated for these classes, but meet together and are instructed by their regular teacher. It is regarded in the same way as an arithmetic or social studies class.

During the three primary years in the elementary school students may not be failed, unless a parent specifically requests that his child repeat the grade. Teachers are not even permitted to suggest to a parent that his child should repeat, and the school is not allowed to submit a report on the child's progress unless such a request has been received from his parents. Often this results in a child attending school for three years without the parents having any knowledge of the child's progress. Class size in the elementary school is limited to 25 students. There are no exceptions. If 76 students register in a three-room school, there must be four classes, or the extra student may be taken to and from the next closest school by taxi if his parents agree.

Corporal punishment is prohibited by law, and the only punitive measure a teacher may take is to detain a student for no more than 15 minutes after school. Freedom is a byword in Sweden, and it is a jealously-guarded right that is indoctrinated, and practised, at an early level. This is a noble idea, but, combined with the restrictions placed on teachers in punishing, results in what appeared to me to be an unruly and unhealthy situation. No matter what a student does, punishment is restricted to the 15-minute detention. Several court cases have taught teachers it doesn't pay to lay a hand on any offending pupil.

There is one recourse open to the teacher of a pupil

who continually disrupts his class. After three serious offences have been recorded, the teacher is permitted to ask the parent to request that his child be sent to a 'help center,' where in small groups he will be instructed in socially acceptable patterns of behavior. If the parents do not make the request, the teacher must take the child back into the classroom until such time as an investigation is conducted by the educational authority, which alone has the power to transfer a student to a 'help center' without the parent's approval.

The facilities we saw in Sweden were excellent. Although we probably saw the best there was, at no time in our tour did we have reason to believe it was out of the ordinary. The elementary school buildings, although inflexible in design, contained bright modern furniture, and a myriad of such aids as overhead, slide, and movie projectors. Printed charts and diagrams were displayed in every classroom, and it was not uncommon to find a piano in the classroom. We were often of the impression that perhaps there was too much in the way of mechanical aids. I suspect that this has political connotations—school boards are elected along party lines and no doubt the plentiful equipment is helpful at election time to convince the electors that their students are getting the best possible from this or that political party.

Secondary System Is Like Our Own

The senior secondary schools—or Gymnasia as they are called in Sweden—are three-year institutions for students in Grades 10, 11 and 12. A recent reorganization of the Swedish school system has produced a system remarkably like our own. I was curious to know if they had patterned their new system on ours, but no one knew. Quite probably both systems developed separately. Students entering the Gymnasium select one of five programs. Three are of an academic-technical nature, and two are vocational programs.

An interesting difference is the role of the guidance counsellor. Counsellors in our schools help a student to select his program, but this does not occur in Sweden. The law prohibits a school from suggesting a course of studies to a student. He must plan his program with the help of his parents; if the parents wish, they may then consult with the school, but the school is prohibited from initiating such action.

In fact, guidance counsellors are seldom found in Swedish schools, although most schools have a 'Vocational Director,' whose job is to place each student in three jobs of one week's duration each during the school year. In talking to one young woman who held this position, I was surprised to discover she had only four years of teacher training and no experience, and that she was placing students in jobs, designed to help them select their future career, without the use of any tests and solely on the basis of a five-minute interview. When she was asked if she didn't feel unqualified to direct boys into vocational fields, for surely she had no comprehension of the man's workaday world, her reply was that in a democracy all people were equal and women had as much right to direct boys as men had. She even went so far as to say that Sweden was becoming a unisexual state, and that in a few years, when the state nurseries were fully operating, women would no longer bear the burden of caring for their children and would be on a completely equal footing with men.

This idea of equality and freedom is prevalent throughout Sweden. Teenagers are held completely responsible for their own behavior. One's initial reaction, on walking into a Swedish school, is one of shock and surprise. In one Gymnasium we visited a large majority of the boys wore dirty, unkempt, shoulder-length hair; girls wore slacks of every description, and those who weren't wearing slacks wore mini-skirts and tight sweaters that left little to the imagination. Such dress hardly provides an atmosphere conducive to learning! Dress is the student's responsibility and the school is not permitted to interfere.

Behavior Is a Personal Responsibility

The same thing is true of manners. With a 15-minute maximum detention period, a student may behave in almost any way he wishes. In cases of flagrant disobedience and violation of regulations, he may, with parental permission, be sent to a 'help center,' as noted earlier.

The Gymnasium in which we spent most time enrolled 500 students. The staff consisted of 45 teachers and administrators. The rooms were very similar to classrooms in B.C., with similar furniture and fixtures. The exception was in the area of audio-visual equipment. Each classroom had its own slide projector and ceiling-mounted screen and blackout curtains. In addition, each two classrooms had an overhead projector and each four classrooms a movie projector. In this particular school eight classrooms were equipped with a 23" television set used to monitor programs broadcast by the state television network. There was also a fully equipped 25-place language laboratory. But again, politics may have been the main reason for all the equipment—it wasn't being used. Layers of dust gave mute testimony to long periods of idleness. The school, although only one year old, showed little imagination in design. It was a standard, inflexible 'shoe-box.' There were, for example, no special facilities for team teaching.

It was revealing, too, that of four classes I visited only one was being taught by a properly qualified teacher. Two were being taught by university students (neither of whom was planning to be a teacher) earning a little extra money, and one was being taught by a retired army officer doing the same thing. This reflects one of the major problems in Swedish education. In spite of high wages many teachers are leaving the profession to enter less harassing occupations in industry. The restrictions placed on teachers regard-

ing how they may discipline students and the freedom permitted students are the major factors contributing to the teacher drop-out rate.

Education in Sweden is provided by the state at no direct cost to the student or his parent. Instruction is provided and, in addition, a student receives new books each year (which he may keep), paper, pencils, pens, and all the sundry items required. During the morning milk is available, again without charge, and in secondary schools coffee, too, is on hand. Every child in every school in Sweden is served a hot lunch at noon, and after their sixteenth birthday, students receive a study allowance of $10 a month. Costs are a staggering burden to the taxpayer.

In some respects Swedish education may be ahead of ours, and in some respects it has developed along a different line. As a result of direct political influence, schools are well equipped physically, class size is restricted to what would generally be regarded as a reasonable level, and students are provided with all they need. There is never an economic reason for a student's leaving school. On the other hand, although the Swedish people tend to think they are ten years ahead of us with respect to sex education, to freedom for students in manners and dress, to restriction of the schools in guiding students, and to the lack of communication with parents, this development has taken place in Sweden as a result of that country's cultural and social organization.

I am convinced, as a result of my study, that, before we assume that we should imitate or shun the educational developments of any other country, we must examine our own social and cultural background. Any changes must be made accordingly. □

CANADIAN SCHOLARSHIP TRUST FOUNDATION

CROFT ALLISEN

CANADA NEEDS UNIVERSITY GRADUATES in great numbers and will reward those who can bring a university education to her service. The greatest problem facing parents or others interested in children is to provide the money necessary to meet the expenses involved in achieving higher education, even though a growing part of the basic expense is to be paid from public funds.

CST Foundation was organized with all this in mind. It is a non-profit charitable organization which is devoted to programs of educational support and research. Leading these programs is the Canadian Scholarship Trust Plan. The Foundation's Canadian Scholarship Trust Plan is original and unique in its co-operative method of enabling parents and others to provide the funds necessary for the university education of children under the age of eight years at time of enrollment.

Statistically speaking, Canada will graduate only 7% of its elementary school students from university in the coming years. Numerous surveys across the country show that the main reason for such a low graduation rate is lack of funds. A university education is expensive; in spite of all that government contributes, a four-year university course may cost the individual $6,000 or more. If, however, a child is fortunate enough to begin a university training, his chance of completing is good, for more than ⅔ of those enrolling for university graduate with a degree.

We know, too, that a university education is the key to the benefits of higher income. On the average the university graduate will have lifetime earnings from $140,000 to $180,000 more than a person with

only a secondary school education, and $220,000 or more more than a person with only an elementary school education.

It was for all these reasons that CST Foundation was instituted. There are now 35,000 children enrolled and this number is increasing steadily. More than $17,500,000 has been subscribed to date under existing plans and an additional $80,000,000 has been pledged by parents and others for the future higher education of these children.

How does the CST Plan work? It is very simple. Anyone (parent, grandparent, corporation, etc.) may enroll any child before that child reaches eight years and four months of age; the best time is between birth and the first or second birthday. The subscriber (parent, etc.) deposits small sums at regular intervals, or a lump sum, in a savings account at any of the 1,500 branches of the Canadian Imperial Bank of Commerce, the depository of the plan. The principal funds on deposit are in the name of the subscriber, and *are always his money.* The funds may be withdrawn at any time or on completion of the plan. The subscriber agrees to contribute the income earned from these deposits to the trust funds of the Foundation and, in turn, the Foundation is bound by the terms of its incorporation to pay out *all* of these funds in tax-free cash scholarships for the advancement of university education of Canadian school children enrolled in the plan.

Savings Pay First-Year Fees

Upon completion of the deposit period, the subscriber closes the savings account and uses the accumulated funds, less a small enrollment fee, to pay for the first year's expenses of attendance at university for the nominated child. If the child is successful in merely passing into second year, the Foundation will award cash scholarships which will pay in full for all costs of attendance. The same holds true for the third and fourth years. The students may attend any university in the world which comes up to the standards of the Conference of Canadian Universities. The scholarships cover room and board, tuition, registration, books, equipment, laboratory and library fees. If the child should receive a scholarship or financial assistance from any other source, including government participation, he still receives his full allotment from CST on the same basis as any other enrollee.

There are other protections and benefits. If a parent who was under 45 at the time of subscription dies before completing his deposits, no further deposits are required and the child still participates fully in the benefits. One child may be substituted for another as long as they are both under eight. If an enrolled child dies any time up to the completion of the first year of university, all the benefits may be transferred to any other student who is not older. A Family Allowance Plan is available for children who have not reached their first birthday. It is also possible to purchase the right to the three years of scholarships by making a special single deposit. Under this method there will be no capital savings for first year of university, but the nominee will be entitled to full participation in CST scholarships for second, third and fourth years. Completion insurance of $2,000 is also available at very little cost. If the enrolled child does not wish to attend university, the subscriber may convert the university plan for the technical plan which will allow the nominee to receive the second and third years of any approved technological course.

Mr. Allisen is the CST Foundation representative for the Vancouver-Burnaby area.

Directors Recommend the Plan

In British Columbia the Advisory Board of Directors includes Senator Norman A. M. MacKenzie, President Emeritus of UBC; Neville Vincent Scarfe, Dean of the Faculty of Education, UBC; Dr. John F. McCreary, Dean of the Faculty of Medicine, UBC; Dr. Malcolm Taylor, President, University of Victoria; Wilfrid J. Borrie, Chairman, Pemberton Securities Ltd., and Stanley H. Bekins, President, Bekins Moving and Storage Co., Ltd.

In a message to British Columbia parents these Directors state:

'As members of the Advisory Board of CST Foundation we would like to state our full support of the Canadian Scholarship Trust Plan.

'We note that citizens are gaining an impression that *all* expenses of higher education will be borne by government. There is danger in such thinking. Governments in Canada are faced with the expenditure of over three billion dollars in the next few years merely to extend our university facilities and to assist with their operating expenses.

'If governments make more money available to students, both a means and an aptitude test will probably be required. A substantial number of children who *should* attend university or who *should* acquire a vocation may be left out unless a plan of financing is started early by their families.

'We fear that undue publicity and exaggeration of government aid to Canadian students may create a false sense of security. The end result could be fewer, rather than more children achieving a higher education.

'In our opinion the Canadian Scholarship Trust Plan offers one of the best guarantees that every intelligent young man and woman whose parents take advantage of this plan will have the opportunity to receive higher education.'

The Canadian Scholarship Trust Foundation maintains offices throughout Canada. Information may be obtained by telephoning Croft Allisen at 327-3845 in the Vancouver-Burnaby area, or Bryan Bell at 939-7043 in the New Westminster-Coquitlam area, or by writing to either of the above at 796 East 56th Avenue, Vancouver 15.□

COMMUNICATION

and Curriculum Reform

JACK R. CAMERON

THE ULTIMATE PURPOSE OF EDUCATION is to civilize a human being. The public schools take a self-indulgent, undisciplined child and attempt to turn him into a charitable, co-operative, rational adult. In other words, education is designed to change a savage into a gentleman.

Since man's ability to use language appears unique, learning how to use language effectively is a vital phase of this civilizing process. Such training has largely been the responsibility of English studies, which aim at producing efficient senders and receivers of verbal communication. I propose to examine one major reason why the public schools have often been unsuccessful in their efforts to train efficient senders of communication—speakers and writers—and then to speculate on whether or not certain principles in the field of English have implications for curriculum reform in the other disciplines.

One of the first things we must realize is that it is a great mistake to think in terms of absolutes. As popularly applied to language, the words 'right' and 'wrong' are meaningless; rather, it is proper to speak of language as being 'appropriate' or 'inappropriate,' as 'acceptable' or 'unacceptable.' There are no rules governing the use of the English language. Standards of correctness are social in their origin, and as the linguistic habits of society change, so do these standards. The role of the grammar book and the English teacher is to *report* as accurately as possible how the language is used by native speakers today. Any statements about language must be *de*scriptive, not *pre*scriptive.

This principle of usage is often attacked by otherwise well-informed people who do not realize that much of the information they have inherited about language is mythology. 'Are there no rules?' they protest. 'Does anything go? May we talk and write any way we please?' The only reply the linguist can make is that it depends on the language standards acceptable *in a person's state in life*. If one wishes to experience economic and social success among a certain class of people, his linguistic habits should closely approximate those of others in that class; otherwise he risks embarrassing or irritating his audience. There are always exceptions, of course, but it is generally true that people are fairly sensitive, even emotional, about language, and the ability to use it appropriately is an important skill.

The tasks of the curriculum builder are to determine what 'dialect' of English is most influential in our society and to organize courses and write textbooks that focus realistically on that dialect, which might be called Standard English. This is the brand of English spoken and written most of the time by the majority of educated, cultivated people. Within it are varying degrees of formality, depending on the social situation. Students should certainly have an insight into the two other main dialects, Formal and Non-standard, but their primary goal is the mastery of the Standard dialect.

A former member of the Faculty of Education, UVIC, the author is now working for his Ph.D. at the University of Alberta.

Two rather thorny questions immediately face the teacher of English: first, who are the 'educated, cultivated people' who set the style; second, how does the linguist discover what the language standards of such people are?

In answering the first question one cannot set up such rigid qualifications as possession of a college degree. The fluency of many graduates, particularly those who have not had the exposure to language demanded by the humanities, is frequently marginal. Nor is it satisfactory to rely solely on the language habits of specialists in English and linguistics. The majority of them have been involved in the professional study of language too long to be entirely dependable as judges of current usage over the whole spectrum of the educated population. Their judgment is valuable, of course, but there is a danger that they will be somewhat myopic as a result of prolonged association with the formal standards of student essays and language textbooks.

What Is the Standard for 'Good' English?

Experienced, reputable editors and journalists would no doubt be included, as would representatives of industry and the professions. The business world must surely be consulted as long as teachers of English insist that students must learn 'good English' to get and hold jobs. But what businessmen would be involved? Bank managers? Personnel managers for large companies? Owners of hairdressing establishments? In any case, it appears important that teachers have a clear idea of how influential men in business who deal with public school graduates interpret the term 'good English.' In the past only commercial specialists have shown any interest in this problem, and they have frequently based their assumptions on traditional grammar texts rather than on empirical investigation.

Data could be gathered through personal interviews, observation of formal and informal speech and writing, and questionnaires. Unfortunately, many people, when asked about their language habits, reply in terms of what they think they should do rather than in terms of what they actually do—which is what counts. Informal observation is the most valid approach, but it is cumbersome and inefficient, particularly in matters of speech. It is rather awkward to ask a man if he minds letting a tape recorder grind away in his home or office day after day. And members of university or professional organizations would likely balk at prolonged recording of their linguistic performance during meetings.

However, suppose the evidence has been gathered; it is then a question of what to do with the data. The first move would probably be to examine both the course of study and the official textbooks to determine whether or not their contents accurately reflected the linguistic practice of educated Canadians. What did not would be discarded or revised. For instance, the average student spends dozens of hours during his school years attempting to learn when to place commas in a compound sentence and when to use the comparative instead of the superlative degree of an adjective. If the empirical method revealed that educated Canadians regularly neglected such punctuation and usage, the teacher would be better advised to spend school time on something more important.

If drill and textbook space involving insignificant points (i.e., unimportant in Standard English) of grammar, punctuation and usage were eliminated, there would be more time for study of such things as mass communication, critical thinking, the principles of language, and vocabulary enrichment. English language instruction would become more useful and more interesting.

One of the main reasons why public school education has neglected the principle of usage and has, instead, forced all students to learn the rigid minority dialect called Formal English, is that mass education has yet to shake free from the idea that secondary education is designed primarily to prepare students for university work. English departments have been influential enough to keep the secondary English curriculum centered on the standards of the college term essay rather than on the realities of Standard English. Because English teachers have traditionally been oriented to literature, they have had neither the training nor the interest in linguistics to see how fallacious it is to design a secondary school English program on the premise that university work is the ultimate goal. They have neglected the living language from the pens and tongues of contemporary Canadians.

Classroom English Is Not 'Outside' English

Students, of course, recognize rather early that the English language taught in the classroom is not the same English language they hear in the world outside, and they do not believe that the English program is preparing them to enjoy the pleasures and avoid the dangers of the electronic culture outside. Thus the teaching of language loses its vitality, and students fail to acquire a respect for the power of the spoken and written word. Many of them become careless in using and listening to language simply because nobody has ever demonstrated convincingly that the standards of the English class are realistic, and not a series of academic quibbles. The frequent comment, 'Oh, you're an English teacher—I'd better watch what I say!' reflects the failure of language instruction. English teachers and curriculum specialists have made their own reputation.

Does the principle of usage apply only to English studies, or does it have implications for other subjects in the curriculum? A little reflection reveals that it has a great deal of significance for other subjects—particularly mathematics, science and social studies.

The principle of usage indicates that there are no absolute standards of linguistic correctness and that the acceptability of any utterance can be determined

only within a specific social context. In other words, it is necessary to make distinctions if one wishes to communicate effectively in various situations. If this concept of usage is broadened to include all fields of study, not merely language, it might be restated as follows: *There are various levels of sophistication possible in discussing the subject matter of any discipline, and it is necessary to know what mastery of that subject matter is required for effective communication at the various levels.*

For instance, one can talk about mathematics to a child in elementary school, to a friend who has mentioned the recent rise in the cost of living, to a teacher who is concerned with percentiles on a reading achievement test, to a trust company about a mortgage, to a freshman class about set theory, or to a nuclear physicist about wave functions.

Science can likewise be discussed at several levels: an explanation to a child of why the leaves fall, a coffee-break chat with a friend over the latest Gemini capsule, a heated discussion at a public meeting protesting local water pollution, or a learned conference with a geophysicist concerning magneto-hydrodynamics.

In social studies one may speculate on whether or not to go to the mountains or seashore for a vacation, discuss the local egg market, participate in a seminar on the economic development of Central America, or read a paper to a learned society on a new theory of western culture.

Levels of Communication Must Be Considered

There are many levels of communication. Specialists in the various disciplines must be prepared to give an honest and realistic answer to the important question, 'For what levels of communication are we training young people?'

The point was made earlier that one of the mistakes of English education has been the teaching of a level of English that is used least in our society. Much of the blame has been laid on English departments at the universities, which have trained English teachers and—although perhaps indirectly and often simply by default—have encouraged the public schools to teach a majority of students a formal level of English appropriate to term essays in the humanities. They have countenanced the focus on a minority dialect simply because such a dialect happened to suit their particular purposes. Science, mathematics and social studies have been guilty of the same error. English education is at last seeking a compromise, but mathematics and science in particular are even more flagrantly disregarding the principle of usage by toughening up their secondary school courses, making them more technical and advanced than ever before.

English teachers, albeit slowly and often reluctantly, are facing the fact that the goal of language instruction in secondary school is not merely to produce writers of effective term essays in college. Mathematics and science teachers must also understand that the role of those same schools is not to prepare students for future discussions of wave functions and magneto-hydrodynamics. Curriculum planners have been wrong to force all students in the academic stream to learn to write Formal English; it is just as wrong to force all students to work at a relatively sophisticated level of scientific and mathematical thought when, for most, such efforts are not only extremely painful and time-consuming, but also essentially useless.

Perhaps it is necessary to emphasize once more what is meant by the statement that science and mathematics are 'disregarding the principle of usage.' It is important to note that this principle does not call for a *mastery* of subject matter at various levels, but rather for an *awareness* of the existence of those levels. Thus the goal of mathematics and science education should be to give every student an opportunity to learn as much mathematics and science as will be useful and meaningful to him *in his state in life*, and no more—since anything more would be superfluous and quickly forgotten.

Courses Should Be Broadened

If this were the aim of the schools, the bank clerk with a Grade 12 education would possess a functional skill in mathematics, plus a broad knowledge of the field of science, yet would be *aware* of the historical development of mathematical and scientific theories. He should also have a general conception of their role in the world of sophisticated research and technology that will forever be beyond his reach. He would have, in short, a more liberal education than he gets today. As things stand now, his final two years in secondary school make him sweat over technicalities designed to prepare him for college study he will never undertake and leave him with little grasp of the philosophy of mathematics and science and their place in the modern world.

A partial remedy is to inject courses in general science, and in the history of science and mathematics, into the secondary curriculum, so that non-specialists will not be forced into a rigid stream of unduly technical courses. Students who show promise in mathematics and science might be given an enriched program, but even they would profit from a more historical-philosophical approach for a couple of years before undertaking intensive work.

It is not a more difficult and specialized curriculum that is needed in secondary education, but rather an approach designed to turn out men and women with a broad perspective on the major areas of human knowledge and with an awareness of the contributions of each to the development and functioning of civilization. Once this premise is accepted by curriculum designers for all subjects, it will be possible to build a program of secondary education that will be of interest and value to the majority of students, not just those headed for university. □

WE CAN'T IGNORE AUDIO-VISUAL AIDS

J. R. POLLOCK

WHILE FLOATING IN THE RARE atmosphere of cloud nine I came upon a little story in Marshall McLuhan's *Gutenberg Galaxy*. He attributes it to Heisenberg. It recounts how Tzu-Gung in his travels came upon an old man irrigating his garden. With tremendous effort this farmer repeatedly descended a well and lifted out a vessel of water which brought meager benefit to the parched land. Tzu-Gung explained to him how, through the employment of a draw-well, he could irrigate many times the amount of land with the same expenditure of labor.

Angrily the old man replied, 'I have heard my teacher say that whoever uses machines does all his work like a machine. He who does his work like a machine grows a heart like a machine, and he who carries a heart like a machine in his breast loses his simplicity. He who has lost his simplicity becomes unsure in the strivings of his soul. Uncertainty in the strivings of the soul is something which does not agree with honest sense. It is not that I do not know of such things; I am ashamed to use them.'

Today, two thousand five hundred years later, no one is more aware of the uncertainty in the striving of men's souls than the teachers who seek to prepare young people to meet the challenge of a technological society. Now it is almost axiomatic that the survival of a nation depends upon the education of its citizens; this may be considered to be true whether one thinks in terms of national defence, economic well being or cultural continuance. This makes education a matter of concern for everybody and this concern is reflected in the many critical observations, pertinent and impertinent, commonly expressed today; everyone seems to have something to say about our schools and our programs of education.

It also makes education the very serious business of the teachers who are charged with the professional responsibility of bringing training and education to the young people of our country. This is their job and because it is an extremely important and vital job, it is only right that they be provided with the tools to do it. Important among these tools are audio visual aids. Some of these aids are the mechanical and electronic products of our technological society. In exploiting them, is there a danger of perpetuating the uncertainty in the strivings of the soul?

The task is essentially one of communication and the teacher is a specialist in communication. He knows that he faces failure at the outset if he senses the student has little interest in what he has to communicate or feels no need for it. The skilled use of audio visual aids can help the teacher stimulate interest and establish need. The teacher also knows one cannot effectively communicate something which lies outside the experience of the pupil. Audio visual aids can help the teacher widen the pupil's background of experience. Finally, the teacher knows communication is not complete unless the pupil understands the concepts involved. Audio visual aids can help the teacher explain and the pupil to understand.

Audio visual aids are frequently referred to as media of communication and there is ample evidence today that their intelligent use contributes a great deal toward more effective communication and the resultant learning. Yet there are those among us who, knowing these things, are 'ashamed' to use them.

In spite of his opposition to it the ancient farmer

The author is Director of the B.C. Division of Visual Education. *This article is reprinted with permission from the May-June issue of* The Canadian Audio Visual Review.

with his vessel of water was powerless to stop the inevitable advance of technology. The teacher who ignores audio visual materials is just as powerless to arrest the growing use of these media of communication in the schools today. They are here to stay and are destined to play an increasingly effective role accelerated by the evolving improvements in the techniques of production and utilization. They may be here because some feel they offer some panacea to cure geriatric ills of an incompetent school system or some potent vitamin which will provide the energy and stimuli needed to increase its productivity. They may be here because some appreciate their value as a status symbol. They may be here as the result of aggressive salesmanship. They are here in part because an increasing number of dedicated teachers use them to increase the effectiveness of their teaching.

Teachers are evaluators. They must constantly attempt the objective assessment of what their students learn, what they themselves attempt to teach, the effectiveness of the methods they employ and the usefulness of the teaching tools they use. Today they face the additional challenge of assessing the pressures and motives that lie behind the introduction of the various media of audio visual education.

Education is the teacher's business. The selection and evaluation of the tools of teaching is part of this business. Teachers should have their say. But are they willing to speak out? There seems to be a certain reticence here. Where teachers hold back others rush into print or to the microphone. After all, McLuhan points out that Socrates wrote nothing, that 'The Middle Ages regarded Plato as the mere scribe or amanuensis of Socrates. And Aquinas considered that neither Socrates nor Our Lord committed their teaching to writing because the kind of interplay of minds that is in teaching is not possible by means of writing.'

It is this interplay of minds, the Socratic approach, which has, down through the centuries, made such a precious contribution to teaching and learning. Under the pressure of a technological society it may be well to remember this. Perhaps the old farmer with his vessel and Socrates have still something of value to contribute. □

The Special Class Teacher

Continued from page 69

essential that teachers equip themselves with accurate information and adopt an objective, almost clinical, attitude to subjects of an intimate nature.

The implication is clear: a good measure of emotional maturity is a prerequisite for this kind of teaching. Years of service are not a realistic guide, and youth is not of itself a bar; for it is a lamentable fact that among the older, as well as the younger, members of the profession there are men and women who project their own insecurity and hostility in the classroom. Nevertheless, the special class is not a suitable environment for the newly-qualified teacher. General teaching is surely a necessary part of the preparation for work among exceptional students; and later a return to a normal grade—if only for one subject (as in the secondary school)—is advisable as one means of enabling special class teachers to maintain a reasonable perspective.

Concern is less with actual skill than with the ability of younger teachers to rank their objectives in a realistic fashion and to survey their task, as it were, from an Archimedean point. Should they fail to do this, they will, on the one hand, remain stereotyped in their approach and, on the other, be swept by every tide of change. In both cases the outcome will be sterile from the point of view of both the teachers and the students. □

MARY DAEM

SCHOOL TAKES TO THE SLOPES

THE UNUSUALLY HEAVY SNOWFALL in the Selkirk Mountains of British Columbia gives Revelstoke children a chance to Learn for Leisure.

From the windows of their school rooms, the Grade 4 pupils can look out at the wide ski slopes on Mount Revelstoke, in Revelstoke National Park. It is there they are taken by bus one afternoon a week, to learn to ski. This requires co-operation of school board, National Parks Ski Patrol, bus drivers, janitors, teachers and several skiing ladies.

The children approve so heartily of lessons on the snow that two of them actually planned to fail their year so that they might repeat the following year.

Divided according to ability, they quickly learn to use the 500-foot rope tow and to handle and care for their equipment. But when one pupil was having more than the usual amount of trouble, he was found to be wearing his big brother's boots and skiis and coming right out of them.

Not all pupils are able to take advantage of these lessons. Equipment is expensive and not all children are sports-minded. The school board believes in at least giving them the opportunity.

Once on the slopes, there is work to be done—packing the slopes if fresh snow has fallen. They make all kinds of excuses, but the instructors make sure that all do their share.

The City of Revelstoke is known for the annual Tournament of Champs and the Nels Nelson hill on which, almost yearly, records are broken in jumping contests. While skiing lessons were in progress, a new judges' stand was lifted and put in place by helicopter. The children hardly even looked up. They were too involved in 'stem christies' and 'snow plows' and laughter.

This may be a part of Learning for Leisure. It is also Learning for Fun. □

Mrs. Daem, a professional writer, is the wife of a member of the Revelstoke School Board.

These Teachers Have Passed Away

Active Teachers	Last Taught In	Passed Away
Mrs. Norah May Burr	Vancouver	August 4
William Morton Campbell	Vancouver	August 20
Jack Gurney	Victoria	September 28
Mrs. Clara Webber	Nanaimo	August 28
Retired Teachers	**Last Taught In**	**Passed Away**
Robert N. Grubb	Victoria	September 20
Miss Elizabeth Knowlton	Vancouver	August 23
Mrs. Ida G. C. Murphy	Vancouver	September 11
Miss Lucy E. Underhill	Vancouver	September 24
Miss Evelyn Wickett	Vancouver	August 23

These Teachers Retired in June

SINCE THE PUBLICATION in the September-October issue of the names of one hundred seventy-eight teachers who retired from teaching at the end of June, the editors have been informed that **Mrs. Madge Brett,** of Penticton, and **Mrs. Isobel Simard,** of Enderby, also retired at the end of the school year.

To these teachers are extended the good wishes of their colleagues for a happy future. □

UNESCO'S ACHIEVEMENTS

THE UNITED NATIONS Educational, Scientific and Cultural Organization came into existence after World War II in order 'to contribute to peace and security by promoting collaboration among the nations through education, science and culture. . .'

On September 20, 1963, in speaking before the General Assembly of the United Nations, the late President John F. Kennedy emphasized the importance of 'building the institutions of peace.' He added that 'new means should be found for promoting the free expression and trade of ideas—through travel and communications, and through increased exchanges of people and books and broadcasts. . .'

These words eloquently describe the purposes and the functions of UNESCO. Because UNESCO is man's best hope for the future, and because UNESCO is now celebrating its twentieth anniversary—actual celebrations will extend for an entire year beginning November 4, 1966 — we have outlined some of UNESCO's achievements.

Intergovernmental Action

UNESCO has regularly assembled the governments of the world to attend to hitherto neglected potentials for international co-operation. These meetings caused governments to give higher priority to the business of utilizing education, science, and culture for the common good of all peoples.

Intellectual Co-operation

During the past twenty years, UNESCO has brought together tens of thousands of world leaders in education, science, and culture. From the interchange of their knowledge and experience have come productive activities and programs transcending national boundaries.

Attack on Illiteracy

UNESCO has focused world attention on the scourge of illiteracy. It has shown that 700 *million* people in the world are totally illiterate and that almost half of the world's children do not go to school. The World Literacy Congress at Teheran in 1965, sponsored by UNESCO, laid plans to begin attacks against illiteracy.

Improving Village Life

To improve the lives of people in remote villages, many of whom lack such fundamental knowledge as how to write their names, how to count or even about the elements of basic hygiene, UNESCO has established two community development centers: in Egypt (for Arabic-speaking peoples) and in Mexico (for Spanish-speaking countries). These centers train teachers from many lands who will devote their lives to reducing ignorance and poverty found in small villages the world over.

For the Refugee and Displaced

For nearly 16 years, UNESCO has provided elementary and vocational education for thousands of Arab refugee children in Palestine. More recently, UNESCO provided teachers for the Congo when that country was in turmoil.

Struggle for Compulsory Education

Convinced that the attack on ignorance must take many forms, UNESCO has concentrated upon providing selected solutions to the problem. One of these is universal and compulsory primary education. Today, as a result of UNESCO's urging, prodding—even pleading — there are in Africa, Asia, and Latin America regional long-term plans for making compulsory primary education a reality.

Preserving Man's Heritage

UNESCO has stimulated international interest in preserving, protecting, and restoring historical buildings and monuments as well as areas of natural beauty. UNESCO helped save Abu Simbel and other monuments of Nubia from the

The teacher can be lost, his or her conscientious effort to no avail, if first the parent fails to teach the child self-control and is remiss by neglecting to instill, from its earliest impressionable years, the holding of passion and prejudice and evil tendencies subject to an honorable and reasonable will; in substance, the Golden Rule, to do unto others as they would be done by. For education begins with the breath of life and, before we are aware of it, the foundations of character are laid. This initial training combined with the pupil's careful association, eases the burden of the teacher when further education of the mind can flourish.

rising waters of the lake formed by the Aswan High Dam on the Nile River.

Human Rights

UNESCO has steadily pressed on governments and peoples throughout the world for acceptance of the principles set forth in the U.N. Declaration of Human Rights. It is especially well situated for this work through its association with civic leaders, educators, and other opinion makers.

Exchange of Persons

UNESCO has facilitated the exchange of thousands of students, scholars, teachers, and workers through its publications listing fellowships and other opportunities for study, travel and work abroad. It also awards UNESCO fellowships for foreign study and training.

East-West Understanding

UNESCO has promoted mutual appreciation of Oriental and Western cultural values. Its special project has helped create institutes of Oriental studies at Tokyo, New Delhi, Beirut, Damascus, Cairo, and Teheran. It has brought about improved curricula and textbooks, stressing previously neglected cultural values. And to spread knowledge about life and values in East and West, the project has sponsored lectures, translations, exhibitions, travel, and films.

Planning for Schools

UNESCO underscored the need for long-range planning for orderly development of schools and colleges. It helped set up the International Institute for Educational Planning in Paris. Leaders from developing countries look to this center for help in making the blueprints necessary to the growth of their educational systems.

The Setting of Standards

UNESCO has initiated 17 international Conventions and Recommendations for universal standards regarding formal aspects of education, science, and culture. The most significant of these protect copyrights; eliminate customs duties on educational, scientific and cultural materials; and reduce discrimination in education.

Cross-Fertilization of Culture

UNESCO sponsored the translation of literary masterpieces and the reproduction and circulation of works of art from many lands. It has extended and increased the world's knowledge and appreciation of the common cultural heritage of mankind.

Space for Learning

The world's children need millions of new classrooms and school structures. Recognizing this, UNESCO has established in the Sudan, Indonesia, and in Mexico regional school building research centers. These centers are used by governments seeking advice on all aspects of school design, especially adaptation of building materials to local requirements. □

QUOTES AND COMMENTS

VITO CIANCI

ON THE WALL ACROSS FROM where I sit in the staffroom is a spanking new cork-surfaced bulletin board on which are stapled a number of items of particular interest to me at the moment.

One is the recent Administrative Circular on Examination Policies and Procedures for June 1967. Another is a clipping from the Vancouver *Province* with the heading 'Exams de-emphasized in Vancouver report cards.' Finally, two clippings from the latest ECTF *Newsletter*—the editorial proclaiming 'Put Up or Shut Up?' and a piece with the heading 'Good Riddance to Exams.'

Something here doesn't add up. De-emphasis in Vancouver. Anywhere else? Good riddance where? Are the newspaper and newsletter pieces accurate or are they prematurely jubilant? Is the administrative circular designed to curb this stepping out of line?

For a while earlier this term it seemed that we classroom teachers were going to be allowed, in the words of the editorial, 'to accept the responsibility for what goes on in the classroom' and make our own judgments on the work done by the students. It even appeared to the more optimistic that we were going to decide on passes and failures. The millenium was just around the corner (maybe ?) and we were to be freed from the heavy-handed bureaucratic and centralized control of the external final examination.

As I interpret the administrative circular, my idea that the whole business was going to be de-centralized and simplified promises to be another pipe dream.

I've lost count of the number of times since I started teaching that we've gone through changes and upheavals and been smothered in an avalanche of departmental bulletins about examinations, report cards and the rest of it. As Omar Khayyam almost said, 'This is where I came in.'

Does anyone really want to simplify procedures? Is anyone seriously interested in trusting me and my fellow classroom teachers to pass judgment on the students we teach? I doubt it. It seems as if things are going to tighten up even more. I might as well pack it up and let a computer take over and decide whether or not my students should pass.

The new regulations are even more cumbersome than the previous lot, and their implementation will put a heavier burden and bring bigger and better headaches to principals and teachers.

But then, the bureaucratic mind seldom considers the welfare of those at the bottom of the heap. Even Churchill had to admit this, when during the war he said, 'When one is in office, one has no idea how damnable things can feel to the ordinary rank and file of the public.' □

COVER STORY

ALTHOUGH OXEN WERE commonly used to pull the heavy freight wagons on the Cariboo Road, mule teams, pack horses and even camels were used.

In 1862 a German named Laumeister brought a few camels into British Columbia. The United States Government had used Bactrian camels like these during the 1850's for transportation over the California deserts and that is where Laumeister probably secured them.

Thinking they would be at home in our dry belt, he used them to pack supplies into the interior. The sharp rocks of the road cut their feet, and they frightened the pack trains of mules and horses. They were finally turned loose to graze in the fields near Westwold, where the last one died about 1905. □

FROM OUR READERS

Public Speaking Should Be Taught

Vancouver, B.C.

Sir,

A good teacher knows how dependent he is on public speaking for the successful presentation of his ideas in the classroom. But how many teachers make public speaking a lesson for their students?

Several teachers I talked to while an Education student at the University of British Columbia told me how painfully inadequate their training in public speaking had been. Most of these men and women had made a deliberate effort to improve their own skill before becoming teachers, but I was sorry to learn that not one had set aside classroom time to help their students develop themselves in this vital area.

While I believe the proper place for detailed lessons in public speaking is the English class, there is no reason why the teacher of any subject cannot help. Presentation of oral reports in the sciences, a debate on Viet Nam in a social studies period, even an informal seminar on 'Mod' styles in home economics; each can provide a step toward self-confidence in oral communication.

We hear so much these days about the breakdown of communication between men, but so little about the cure for the problem. I feel the cure lies with the young, and with their teachers. The devotion of even an hour a week in each classroom to oral communication would give students that touch of self-confidence which would carry them a long way forward in today's world.

ERIC H. WILSON

Reply to Bruce Ewen

Kitimat, B.C.

Sir,

Bruce Ewen's example was well chosen to illustrate his argument. However, as long as *place value* is being used, the answer is either wrong or incomplete.

The situation might be clarified if it is stated that an intermediate stage in working this type of problem may be included if the figures are set out with spaces between the columns as is done with lbs. and ozs. The problem could then be 'done' this way:

	2	5	7 eight
+	3	2	4 eight
	5	7	11 eight
=	5	7	8 + 3 eight
=	5	8	3 eight
=	6	0	3 eight

Answer: 603eight

and credit could then be given for correct steps. It will be seen that in this example an answer of 5711-eight is no more acceptable than 111 for 18 + 3.

Note that in a numeration system to the base eight the symbol for eight would be 10eight and that the symbols 8 and 9 would not be used, the eight digits necessary being 0 to 7. In the binary system, for instance, the only digits used are 0 and 1. Contrary to Bruce's opinion, it would seem to me that the digits being less than the base is a fundamental concept and should be stressed.

One other point. It might be more mathematically satisfying if the algebraic form had been given as:

$$2x^2 + 5x^1 + 6x^0$$

where 0 indicates the unit column multiplied by *no* base factor, 1 indicates units multiplied by *one* base factor (of eight), and 2 indicates units multiplied by *two* base factors (each eight). This would provide the pupil with some understanding of exponentials as well as an entry into algebra.

BERT BREWER

A Note of Humor

Creston, B.C.

Sir,

In these times of salary negotiations perhaps a note of humor would be appreciated by some of our committees and by school board committees.

Last fall while we were in the midst of our negotiations here, the local board, as has been its custom for some years, kindly invited all administrators and teachers new to our area to a very pleasant social function.

I had been detailed to organize some entertainment in which I included some community singing. During this activity I offered various 'dignitaries' including principals and board members a chance to name a tune for us to sing together. Mr. Hugh Anderson, who was, and still is, chairman of the board came up with song number 72, 'Side by Side.' You can imagine the reaction this brought when we looked at the first line in the song, which reads: 'We Ain't Got a Barrel of Money.'

ALFRED B. PRICE

Mrs. Cull Complimented

Victoria, B.C.

Sir,

Soon to set out on safari, my wife and I desire adventure in what is nevertheless planned to be quiet tempo for 16 weeks of ocean travel and a like period ashore.

For my wife, adventure will be based largely on all that inspires her pencil and brush.

For me, whatever else comes my way may not for long distract attention from the adventure of working out, imaginatively at least, implications and specifics of Isobel Cull's 'Children and Teachers as a Team' in your September-October issue.

An article that has appealed so strongly to one on pension must mean far more to those of you seeking wider horizons and deeper meaning while still in the active pursuit of your profession.

Good luck and high adventure to those of you who use Mrs. Cull's article as the basis for workshop discussion and classroom practice.

ERIC H. WHITTINGHAM

Prove That Which Is New

Vancouver, B.C.

Sir,

I have just been reading my September-October *B.C. Teacher*, and with mixed feelings of admiration and regret. I sincerely admired much of what was said in the Editor's comments and by Mrs. Cull—not so much that by Colin Brown—but I regretted what was left out.

It is unfortunate that our educational progress does not follow St. Paul's advice to 'Hold fast to that which is good and prove that which is new.' It is also unfortunate that conveniently set up straw men, and over-enthusiastic emphasis on half-truths, prevent a state of balance involving the changing world and those things that never change.

Most teachers were, are, and will be good teachers and we old-timers should not be pictured as putting all emphasis on 'the parrot' or 'attempting to teach for the most part through the linear one-idea-at-a-time medium of print,' or as having 'traditionally attempted to transmit to their students a given body of knowledge.' We meet too many of our old pupils, now mature and appreciative, who greet us as old friends and sincerely thank us for their experiences with us.

I note that the Special Issue will be devoted to 'Mental Health.' If the usual procedure is followed we shall hear much about early discovery, rehabilitation and special services, all of which are good, but we shall hear nothing about such basic causes as the failure to emphasize for the youngster, in co-ordination with personal kindness and interest, the importance of the satisfaction of accomplishment achieved through effort, a respect for properly constituted authority, respect for another's person and possessions, and a sense of obligation.

STANLEY D. MEADOWS

Help Them See When They Look

Continued from page 64

objects from a picture or from a group of concrete articles; selecting similar or different shaped objects from a picture or from a group of concrete articles.

If the weakness is shown in the visual perception area of position in space, such exercises as these can be used for retraining: copying letter sequences correctly; copying number sequences correctly; copying word sequences correctly; pattern making with multi-folded paper or with a number of different colored squares of paper; games of body identifications (e.g., one child takes off one shoe and assumes various positions; other children name foot with no shoe.); locating one different article in a page of similar ones; making mirror image patterns on paper divided into squares.

Exercises Can Be Adapted and Modified

Finally, these exercises are suitable for retraining children with problems in perceiving spatial relationships: finding incomplete or partially hidden objects in pictures; finding objects which are close to, distant from, behind, in front of, above, below, or beside something else in the same picture; relating numbers to their right columns; pattern-making and pattern-copying either on paper or with the use of beads, blocks, or the marble board that Strauss recommends; pattern making and copying with the use of pegboards (This activity may involve two and three color patterns and patterns made by winding wool around and between certain pegs.); solving mazes; picture sequencing and completing.

The exercises and activities outlined can be, as has been suggested, adapted and modified to suit a particular classroom, grade level, and time schedule. Many of them are activities that are frequently included in workbooks and in art, craft, and physical education lessons. Others often are used in reading, arithmetic, and writing. Still others which may appear, superficially, have little relationship to the regular curriculum can with thought be modified for use with a particular subject or lesson area.

The visual perception training which is given to the elementary school child in need of it can prevent his experiencing failure and disillusionment in his upper grade years and in many cases, can even prevent his spending unnecessary years in a special class. When children with this type of problem are treated and retained in regular classes, the special classes can be less crowded and can, therefore, perform their functions more adequately.

Training activities for visual perception can easily be fitted into even the busiest classroom schedule every day. If it is to be fitted in, however, it should be fitted in regularly and conscientiously in order to give the perceptually underdeveloped child maximum benefit. And we do owe it to him to fit it in. □

Reading list available on request.

NEW BOOKS

C. D. NELSON
Book Review Editor

ENGLISH

Modern Composition, Book 4, by Wallace E. Stegner, Edwin H. Sauer and Clarence W. Hach. Holt, Rinehart and Winston, Toronto, 1964. $4.32

The chief virtue of this book lies not in its originality but in its comprehensiveness. In its 601 pages, set in forbiddingly small type, the reader may find intensive discussions on everything from the 'bread-and-butter note' to the formal or informal use of 'who' and 'whom.' Each discussion is accompanied by a number of up-to-date examples and practices which require both analysis and original composition on the part of the student.

The book contains two major and approximately equal sub-divisions, 'The Art of Writing' and 'Grammar and Usage.' 'The Art of Writing' begins with a chapter on the history of the English language, then proceeds to analyze the writing of paragraphs and themes in a traditional manner. Later chapters on literature questions, writing letters, oral compositions and semantics treat these subjects more completely than the books now being used in the B.C. curriculum. I was particularly pleased to find the short story, 'The Cask of Amontillado,' and a play, 'One Day More.'

With the modern de-emphasis on the teaching of grammar *per se,* most would find this section of the book too comprehensive for a one-year course. The authors mention such modern linguists as Gorrell, Laird and C. C. Fries, but in spirit their grammatical analyses more closely resemble those of Curme. Many of the practices involve parsing, as in the 'Grammar Handbook' in *Mastering Effective English.* Some discussion time is given to the effective use of the parts of speech. It would be better if this section were accompanied by a simplified correction key to facilitate self-study of specific problems on the part of the student.—Ralph L. Tortorelli

GIFTED STUDENTS

Gifted Student, by William K. Durr. Oxford University Press, Don Mills, 1964. $6.05

This very readable book sets forth for classroom teachers and principals up-to-date methods for improving the education of gifted children. The author devotes two chapters to detailed descriptions of ways to enrich instruction in the language arts, social studies, science, and mathematics. Another chapter discusses successful programs for the gifted in eight representative school systems. There are also chapters on creativity and motivation and guidance of the gifted. A good appraisal is made of acceleration and ability grouping. Finally, there are chapters on the teachers of the gifted and relationships with parents and the community.

This is one of the best of recent publications in this field.—S. R. Laycock

MATHEMATICS

Algebra, a Modern Approach, by Max Peters and William L. Schaaf. D. Van Nostrand Co. (Canada), Toronto, c1963. 562 pp. $5.75

This is a first-class textbook, combining as it does the most important aspects of the new mathematics with the best of the old. It covers a first course in algebra in detail and with great clarity of presentation. It seems somewhat too long for a one-year course, but would be an excellent source of enrichment for the brighter students. The problems at the end of each unit of work are alone worth the price, and would provide a rich background of test questions for any algebra teacher.

Some errata were discovered, however, over and above those indicated by the publisher:

Page 183, Sec. 4.17 (4). If $a = b$ then $a + b = a + c$ should read: If $a = b$ then $a + c = b + c$.

Page 203, Sec. 5.3, Example 3: The $\left(\frac{3}{3}\right)$ in the middle term $\frac{4}{c}\left(\frac{3}{3}\right)$ should be in red, to conform to the presentation throughout the remainder of the text.

Page 376, Sec. 8.18, Figure 2: The left-hand diagram is improperly labeled. The sides should be 'a' and 'b,' with the hypotenuse as 'c,' if this is supposed to represent the formulas given on page 377. As it stands, it represents $(b + c)^2 = a^2 + 4(\frac{1}{2} bc)$.

The right-hand diagram of Figure 2 is meaningless here, as it sheds no light on the discussion.

Page 465, Sec. 10.9, Example 1: The equation is $y = (x - 2)^2 - 1$ should read: The equation is $y = -\frac{1}{2}(x - 3)^2 - 1$.

Page 487. The third sentence in the last paragraph refers to graphs on facing page. There are no graphs given, but instead there is a picture of Descartes.

These errata in no way detract from the value of this text. As a mathematics teacher, I have read (and taught) several of the recent algebra texts, and for my money this is the best book of the lot.—P.L.M.

MISCELLANEOUS

Child Development, by Elizabeth B. Hurlock. McGraw Hill, New York, 4th ed., 1964. 776 pp. $9.95

This is a revised and enlarged edition of a standard textbook on child development that first appeared in 1942. It updates earlier editions and gives the results of recent research in areas of child training methods, family relationships, emotional deprivation, levels of aspiration, under- and overachievement in schools, social class differences in attitudes and

values, and the effects of social mobility on personal and social adjustments.

An innovation here is the use of brief sections in each chapter headed by 'seriousness of,' 'advantages of' and 'disadvantages of.' This directs the reader's attention to the practical applications of research findings in child development.

All phases of a child's development are dealt with—from adjustments to birth, through physical, motor speech, emotional, social and moral development to play, family relationships and personality.

This book, which is primarily intended for use in teacher-education, is simply written and very complete. A principal or teacher in an elementary school would find it a compendium of up-to-date and useful information.—S. R. Laycock

Creativity: Progress and Potential. Ed. Calvin W. Taylor. McGraw Hill, Toronto, 1964. 241 pp. $8.70

Today there is a rising interest in creativity among teachers, other educators and laymen. As a result there is danger of superficial thinking and practice in this field. It is important, therefore, that teachers, principals, and superintendents of schools have an up-to-date summary of what is currently sound knowledge in this area, as well as of the gaps of knowledge which must be filled by further research. The editor of this book, his five fellow-writers, and the three senior consultants who reviewed the manuscript are all in the forefront of research in this field.

The book begins with a general introduction which stresses the importance of creativity to our society and to future progress in every field of human endeavor. Chapter 2 deals with predictors of creative performance and discusses what is known about the intellectual, motivational, and personality characteristics of the creative individual and how these may be measured. Chapter 3, the largest section of the book, deals with education and creativity and is of special interest to teachers, as is the chapter on 'environment and training for creativity.' The author presents evidence that a child's creativity can be fostered or injured by the practices and policies of the school.

The chapter on 'criteria of creativity' is more technical and will be of interest to those concerned with the theoretical and research aspects of the study of creativity. The final chapter is a readable summary of 'some knowns, needs, and leads.' There is a very complete bibliography of publications on creativity.—S. R. Laycock

SOCIAL STUDIES

Men and Machines, by C. F. Strong. New Secondary Histories, Book III. University of London Press, no date given. (Can. Agt. Musson) $2.65

Third in a series for slower students which treats world history as 'the story of the adventures of mankind through the ages,' and has the Machine Age of the 18th and 19th centuries for its topic. Much more than just machinery is dealt with, however. The text is clear and readable. Each chapter concludes with questions to test comprehension, and a profusion of illustrations, all of which are true historical 'documents,' enlivens every page. Time charts, lists of books for further reading (including historical fiction), and useful sketch maps add to the tudy value of this inexpensive, well-made volume.—J. R. Stickney

Social Studies in Secondary Education, by Jonathan C. McLendon. Macmillan, New York, 1965. (Can. Agt. Collier-Macmillan) $8.25

This book is oriented to curriculum and instruction in social studies, with special attention to the junior secondary grades. Wherever appropriate, secondary social studies are related to the elementary grades. In presenting the main elements of social studies, McLendon reviews valuable practices of the past, updates and extends the teacher's knowledge by closely examining many new experiments and proposals.

The book is divided into three major sections:

1. Why Teach Social Studies?
2. What is Taught in Social Studies?
3. The Teaching of Social Studies.
   a) Approaches and Methods
   b) Utilizing Instructional Material
   c) Guiding Learning Activities.

At the end of each chapter an excellent bibliography is given.—E. A. Lancaster

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