This booklet contains abstracts of projects undertaken through the Hilroy Fellowship Program in Canada for the year 1973. The stated aim of the program is to encourage and reward classroom teachers who are developing new ideas for the improvement of teaching practices. The booklet contains 22 abstracts which cover projects dealing with educational processes, language sciences, natural sciences, social sciences, vocational sciences, and behavior modification. Each abstract contains the following information: (1) a project number, (2) the name and address of the teacher, (3) the name and address of the school, (4) the title, and (5) a brief description of the project. Some of the projects in the language sciences area include the creation of a children's book utilizing bliss symbols; an experience-motivated language program for the primary classroom; language through home economics; a personalized approach to the teaching of oral French; and a program of oral communication with a focus on listening. Some of the projects in the natural sciences area cover ecology, environmental studies, an individualized science program, and physics for the non-scientist. (RC)
INNOVATIONS IN TEACHING

ABSTRACTS OF THE
HILROY FELLOWSHIP PROGRAM
1973

administered by

CANADIAN TEACHERS' FEDERATION TRUST FUND

110 Argyle Avenue
Ottawa, Ontario
K2P 1B4

INNOVATIONS DANS L'ENSEIGNEMENT

ABSTRAITS DU
PLAN DE BOURSES HILROY
1973

administré par le

FONDS FIDUCIAIRE DE LA
FEDERATION CANADIENNE DES ENSEIGNANTS

110, avenue Argyle
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INTRODUCTION

Each year the Canadian Teachers' Federation proposes to publish the abstracts of projects of the Hilroy Fellowship Program. This booklet contains the abstracts for the year 1973.

You will note that each abstract has a project number, in addition to its title and author. If, after reading the abstracts, you would like to see the original material, we will copy the written material and have it sent to you for your own use. If the project involves the use of concrete materials such as tapes, slides, or non-reproducible material, these will be sent to you on loan for a given period of time.

The Canadian Teachers' Federation will make every effort to have all of the projects readily available for those who wish to study them further.

Projects are accepted, published and reproduced in the language chosen by the author(s) and are not translated by this office.

In addition to this publication, the Canadian Teachers’ Federation, in cooperation with the Roy C. Hill Charitable Foundation, will produce a cumulative index. If a copy of this index is not available to you at present, we suggest that you write to the Canadian Teachers' Federation, 110 Argyle Avenue, Ottawa, Ontario, K2P 1B4, requesting a copy. The program has been in existence since 1969 with an average of twenty projects per year.

We hope the publication of these abstracts will prove of value to the many educators across Canada who are interested in creative and innovative, teacher-prepared materials in the field of education.
INTRODUCTION


Veuillez prendre note que chaque abstrait a un numéro, de même que le titre et le nom de l’auteur. Si, après avoir lu les abstraits, vous voulez obtenir les documents originaux, nous reproduirons les documents et nous vous les enverrons. Si le projet inclut l’utilisation de matériaux concrets tels que rubans, dispositifs, ou matériaux non-reproduisibles, nous nous ferons un plaisir de vous prêter ceux-ci pour une période déterminée.

La Fédération canadienne des enseignants s’efforcerait d’avoir tous les projets disponibles à ceux qui voudront les étudier.

Les projets acceptés et publiés sont reproduits dans la langue choisie par le ou les auteurs et ne sont pas traduits par notre bureau.

En plus de cette publication, la Fédération canadienne des enseignants, en coopération avec la Fondation de bienfaisance Roy C. Hill, produira un index cumulatif. Si vous désirez obtenir une copie de l’index, veuillez écrire à la Fédération canadienne des enseignants, 110 avenue Argyle, Ottawa, Ontario, K2P 1B4. Ce programme existe depuis 1969 et environ vingt projets par année ont été choisis.

Nous espérons que la publication de ces abstraits sera utile à tous les éducateurs du Canada qui sont intéressés à des matériaux créatifs et innovatifs, préparés par les enseignants dans le champ de l’éducation.
THE HILROY FELLOWSHIP PROGRAM

FOREWORD:

The Hilroy Fellowship Program was established in 1969 by the Roy C. Hill Charitable Foundation and is administered by the Canadian Teachers' Federation Trust Fund. The aim of the Program is to encourage and reward active classroom teachers who are developing new ideas for the improvement of teaching practices.

Teachers who are working at any level in an elementary or secondary school and who are devising new methods, new approaches or new teaching devices, are invited to apply for Fellowships. Small groups of teachers working as a team under the chairmanship of a coordinator are also eligible. Application forms and related instructions may be obtained from the Secretary-Treasurer, CTF Trust Fund, 110 Argyle Avenue, Ottawa, Ontario, K2P 1B4 or from Provincial or Territorial Teachers' Organizations. Applications may be in either English or French.

In most provinces a Provincial Advisory Council reviews applications and makes recommendations which are forwarded to the National Advisory Council. It, in turn, makes recommendations to the Roy C. Hill Charitable Foundation which makes the final selections. Where there is no Provincial Advisory Council appointed, applications are forwarded directly to the Secretary-Treasurer, CTF Trust Fund.

Hilroy Fellowships are intended to reward the initiative and the professional enterprise of the classroom teacher and to make some contribution toward out-of-pocket expenses in the development of experimental and innovative approaches. It is not necessary, however, that expenses of any kind be involved. Generally speaking, the amount of each award is in the range from $800 to $1,500.

Payment of awards is made in three instalments, the first at the time of approval of the award, the second and third on the receipt of satisfactory interim and final reports on the implementation of the project. A Hilroy Fellowship Certificate is also awarded at the time of the third payment.

While the stated purpose of the Hilroy Fellowship Program is to encourage and reward the innovative classroom teacher, it may be considered to have a more out-reaching objective—namely, the fostering of improved teaching practices for the general improvement of education. In keeping with this objective, this publication is a compilation of the reports of
innovative projects by classroom teachers, projects for which the innova-
tors have been judged worthy of recognition by the award of a Hilroy
Fellowship in the school year 1972—73. It is hoped that this publication
reported upon, and that these reports will encourage other teachers to
experiment and to innovate.

Copies of this report are available without charge to practising teachers
on request to the Secretary-Treasurer, CTF Trust Fund, 110 Argyle
Avenue, Ottawa, Ontario, K2P 1B4.
LE PLAN DE BOURSES HILROY

AVANT–PROPOS:

Le Plan de bourses Hilroy a été établi en 1969 par la Fondation de bienfaisance Roy C. Hill et est présentement administré par Le Fonds fiduciaire de la Fédération canadienne des enseignants. Le but de ce plan est d’encourager et récompenser les enseignants qui, au cours de leur enseignement, développent de nouvelles idées en vue d’améliorer les méthodes d’enseignement.

Les professeurs tant du niveau primaire que secondaire, qui projettent de nouvelles méthodes, de nouveaux moyens ou de nouvelles techniques d’enseignement sont invités à faire la demande d’une bourse. Des équipes d’enseignants, groupant cinq ou six professeurs, sous la présidence d’un coordonnateur sont également admissibles. Des formules d’inscription et les instructions détaillées peuvent être obtenues en écrivant au Secrétaire-trésorier, Le Fonds fiduciaire de la FCE, 110, avenue Argyle, Ottawa, Ontario, K2P 1B4, ou l’organisation provinciale ou territoriale. Les formulaires de demande s’obtiennent en anglais ou français.

Dans chaque province, un Conseil consultatif provincial examine les propositions, formule les recommandations et les envoie au Conseil consultatif national. Ce dernier présente ses recommandations à la Fondation de bienfaisance Roy C. Hill qui fait la sélection finale. Là où il n’y a pas de Conseil consultatif provincial, les formulaires de demande sont envoyées directement au Secrétaire-trésorier, Le Fonds fiduciaire de la FCE, 110, avenue Argyle, Ottawa, Ontario, K2P 1B4

Le Plan de bourses Hilroy veut récompenser les professeurs pour l’initiative et l’esprit professionnel qu’ils ont manifestés en menant à bonne fin une importante innovation en éducation; il veut également contribuer aux débours que représente la réalisation de techniques expérimentales. Cependant, il n’est pas nécessaire d’engager des dépenses dans la réalisation d’un projet. D’une manière générale, le montant de chaque bourse varie entre $800 et $1,500.

Le paiement se fait en trois versements, le premier au moment du décernement de la bourse, les deux autres lors du rapport intérimaire et du rapport final, au moment où le projet est mis à exécution. Un certificat d’associé Hilroy est également attribué lors du dernier versement.

Le but principal du Plan Hilroy, nous le répétons, est d’encourager et récompenser l’initiative des professeurs de classe. Ce projet a également un but plus définitif, c’est-à-dire, instituer des méthodes innovatrices.
d'enseignement pour le progrès de l'éducation. La présente brochure retrace dans ses grandes lignes un projet qui a été jugé digne de reconnaissance par le Plan Hilroy pour l'année scolaire 1972–73. Nous espérons que cette publication jouira de la plus grande diffusion possible, que tous les professeurs bénéficieront de ces idées nouvelles, et qu'elle encouragera d'autres instituteurs à expérimenter de nouvelles méthodes.

Les enseignants peuvent se procurer sans frais des copies du présent rapport en s'adressant au Secrétaire-trésorier, Le Fonds fiduciaire de la FCE, 110, avenue Argyle, Ottawa, Ontario, K2P 1B4.
A CLASSIFICATION OF EDUCATIONAL OBJECTIVES FOR STUDENTS WITH PROBLEMS IN LEARNING

The construction of a classification of educational objectives specifically for students with problems in learning attributable to mental, emotional, sensory, and physical handicaps is a complex task. Mr. Eric Hampson of Vancouver Technical Secondary School chose two promising classifications: classification in terms of subject matter—a category suggesting a progression from elementary facts to the most advanced theories; a classification in which the emphasis shifts to the student in an attempt to select characteristics of learning behaviour which fit into a hypothetical framework. Of this classification, Mr. Hampson says in his final report to the Hilroy Fellowship Program, “This approach has the appeal of universality in that it may be applied to any subject; it recognizes human development as a matrix of physical, emotional, and intellectual growth; and thus it offers the teacher a greater opportunity to capitalize on a student’s assets. These considerations have influenced the construction of the present scheme.”

English and Mathematics, as two basic subjects, have been selected as illustrative material in the cognitive and affective areas. Perceptual and motor skills in general are treated as the content of the phyco-motor domain. The essential ingredient of any such classification is the establishment of a relationship between the objectives, that is, the education objectives and the daily work in class. The chief operation in testing, then was the appropriateness of the classification. Mr. Hampson notes that the teachers most intimately concerned with this classification began to view their work from the prospective of the objectives presented. It was also noted during the trial period that the students work more eagerly when they were told the purpose of the question or task. Mr. Hampson concludes by noting that, “It will be interesting to use the classification throughout the year as the item which lends structure and purpose to teaching”.

12
Name and home address of teacher:

Mr. Len Richman,
9381 Brome,
La Salle, Quebec.

Name and address of school:

Verdun High School,
1201 Argyle Avenue,
Verdun, Montreal, P.Q.

Title:

OUTDOOR EDUCATION AND LEADERSHIP AID PROGRAMME

John Huté, in his book, *New Approaches to Character Development*, "Proposal for St. Marks School", Dallas, Texas, 1967 writes: "Curt Hahn, the founder of Gordonston School and of the Outward Bound movement, foresees in the modern world five major areas of decline which should concern us as educators: the decline of physical fitness, due to modern methods of transportation; the decline in initiative, due to the widespread disease of "spectatoritis"; the decline in care and skill, due to the weakened tradition of craftsmanship; the decline in self-discipline, due to the ready availability of tranquilizers and the decline of compassion, which Hahn calls a form of spiritual death. For these social ills, Hahn prescribes four educational antidotes which have proved their effectiveness in the schools he has founded. These antidotes are "fitness training, expeditions, projects, and rescue service".

Mr. Len. Richman of LaSalle, Quebec, began his "Project Discovery" — outdoor education and leadership aid programme — in 1971 and it continued to the school year, 1973-74. This project is an adaptation of the Outward Bound movement.

In concluding his report Mr. Richman stresses that outdoor education experience is not an end in itself in terms of physical skills developed. The leadership training aspect of his project is of fundamental importance. The students, by literally surviving together, gain that deep satisfaction that comes from helping others. It enhances the self-image and encourages a healthy growth of self.
Mrs. Shirley McNaughton, Supervisor, Symbol Communications Research Project of the Ontario Crippled Children’s Centre, has written a complete children’s vocabulary which utilizes symbols as a substitute for speech. Mrs. McNaughton has based her symbols on those offered in a book by Mr. C.K. Bliss entitled “Semantography (Blissymbolics)”.

The vocabulary is being published in book form by the Ontario Crippled Children’s Centre, Toronto, Ontario, and the costs of publication are being met by the Hilroy Fellowship Foundation.
A $95 polaroid camera, plenty of film and flashcubes, permitted Marlene Sanderson of Cornwall, Prince Edward Island, to develop a "experience-motivated language program for the primary classrooms". Ms. Sanderson’s intention was to construct a flexible language program that would provide for the maximum development of all written expression within the interest areas of primary children. Her polaroid pictures therefore related to Health, Reading, Social Studies and Art activities. In addition to the pictures the class developed a news booklet, a classroom diary in mural form and pictures of farm and wild animals in city parks.

Ms. Sanderson claims that the effectiveness of the program is evidenced by increased reading vocabulary and oral discussion, with almost every child communicating in complete sentences. A great improvement in daily written work is noticeable.
Very often deaf boys and girls between 6 years old and 14 have difficulty learning language. Mrs. Ruth Allen of the Metropolitan Toronto School for the Deaf asserts that many such children often have other handicaps as well, including some which are physical (e.g. visual, cardiac, and orthopedic), borderline intelligence, emotional disturbance, language learning disorders (cultural and social deprivation, broken homes). The great question before teachers of these children is "How can language learning be made more meaningful to them?"

Mrs. Allen was a Home Economics teacher in a high school before becoming a teacher of the deaf. As a home economics teacher, she noted how thoroughly students enjoyed the program and, upon becoming a teacher of the deaf, developed a program "Language Through Home Economics". Usually, Home Economics is a skill subject with little stress on language. This experimental program differs by emphasizing language development through experiences with foods, sewing and related crafts. Communication is oral, not manual. It involves lip-reading, reading and writing, and speech with meaning as well as auditory training, Mathematics, Safety, Health, and Science.

Mrs. Allen has found that her program works well with very slow classes. Consequently, the program will be extended and boys, initially excluded from the program, will be included in the future.

There are three parts to the project: first, a set of slides or polaroid pictures with teaching suggestions and seat work; second, a recipe book, "Language Through Experiences With Food", which contains 50 recipes and includes seat work and teaching suggestions; third, in cooperation with the parents of children, a book, at first entitled, "In The Kitchen With Your Deaf Child" has become a new booklet, "At Home With Your Deaf Child".
Philip R. Best of Whitehorse, Yukon has developed a personalized approach to the teaching of oral French. Essentially, the program is based upon the experiences familiar to children in the Yukon. A manual of conversation sheets and stories forms the basis of this program. With each French sheet in the manual is an accompanying English translation.

The 250 pupils in Grades 5, 6 and 7 are divided into small workable groups each headed by a Captain. Each group progresses at its own pace through a French sheet and its accompanying English translation. When the group is thoroughly familiar with the sheet, it then proceeds to the accoustophones to hear the spoken word. When sufficient fluency is attained, the group goes to the recording room to tape the contents of the conversation sheet. The teacher, who is mainly a coordinator and resource person, then sits with the group and leads a conversation based on the mastered material. If this proves successful, the group proceeds to the next sheet.

The subject material in the manual has been developed from a number of sources: a questionnaire given to the students of various age groups indicating their personal interests and heroes; recurrent themes inherent in the pupils’ out-of-class conversation; from opinions expressed by teachers of other subjects concerning that which appeals most to the child in their subject area. In addition, the pupils have access to the latest French language popular musical recordings and numerous magazines.

Through the courtesy of CN Telecommunications, the children can practise telephone conversation on an internal telephone system.
There was once a time in the land of the Bergundians when all the Captains and the Kings were at war, when there was famine, pestilence, and death in all the towns and in all the countryside, and when men and women withered away with fear.

This was a time of faith. There were some who kept the faith and prayed, saying that the help of God was nearer than the door. There were those who still had the faith but could not pray, saying that God had deserted them. And there were many who abandoned their faith and resigned themselves to a wretched existence.

In the centuries that followed, people often referred to this dreadful era as 'the days of the broken world' and many a story was told in the chimney corner, some to encourage, and some to warn the young. But the story which was most often told, and retold and beloved by all — especially by the children — was the tale of Le Chevalier va-nu-pied, or Barefoot Knight."

These are the opening paragraphs of an anthology of short stories written by high school students of Alberta and edited by teacher T.W. Gee. Every high school teacher of creative writing frequently comes across a piece of student writing which he feels should be published. In the same way, every student in every class given the assignment of writing a short story, or, for that matter, a poem, must think to himself, "Why bother? It’s only going to be cut up by the teacher and thrown in the wastebasket at the end of the year." It’s a pity! The shame of it is amply demonstrated by Mr. Gee’s anthology of writings of Alberta students.

Mr. Gee sees the anthology as providing an outlet for the creativity of talented students, as an opportunity for development of their talent, and
as a motivating force for students to continue writing. The purpose of the anthology also includes the intention to bring the best student writing available to the general reading public of Alberta.

After reading the collected stories, one must really wonder why there is not such a collection in every Canadian province, every year, and, in addition, a Canadian anthology which would include the best from all the provinces.
All teachers seem to complain about the inability of students to listen well. D. Wilson Riche, and his colleagues in the English Department at MacDonald Drive Junior High School in St. John's, Newfoundland, have developed a short program in oral communication called “focus on listening”. The purpose is relatively simple — bring pupils to the point where they realized that listening involves a particular mental ability in which certain skills can be identified.

The procedures followed involve seven phases which ranged from the introduction of the concept of listening and includes such items as sound discrimination, critical listening, discrimination of human sounds and the habits of a good listener. Phase seven introduces pupils to effective speaking in groups.
Attention: Teachers of English Literature!

Do you have a grade 12 student who at the end of the school year can say, "There are so many books here I want to read it's pityful. Too bad I have to graduate."

Gary Hyland of Riverview Collegiate in Moose Jaw, Saskatchewan, started a "packaged reading program" in 1972 and did have the above response from a student.

In Gary's final report he is able to show, quite indisputably, that his students, who were participants in his packaged reading program, read more books, extended the range of their reading interests and improved reading skills significantly more than did non-participating students. As important as these findings are, the program is designed to develop students who will make intelligent, profitable and pleasurable reading a life-long habit. Obviously one cannot measure, in the classroom at the end of the school year, the fulfilment of this objective. However, Mr. Hyland is confident that by succeeding in encouraging a more voluminous and varied reading, the general purpose will be accomplished.

Mr. Hyland's classroom in Moose Jaw looks like a paperback library — 1500 volumes all organized into capsules or packages of three to twenty books, organized according to author, theme, genre, setting, national origin, and so on. Two hundred and five packages in all.

Furthermore, the packages were designed to appeal to students with a varied reading interest or ability: a) total low-level — clusters that are composed entirely of books that poor and reluctant readers can succeed with, (includes some very "non-literary" packages); b) total mid-range —
books of an interest and ability level commensurate with typical teenage reading habits: c) mixed-level — includes combinations of a) and b) or mixtures of teen and adult-level books and classics and various combinations of these types; d) challengers — clusters which obviously demand above-average reading interests and skills which stimulate superior readers. Packages of the mixed-level sort are the cornerstone of the program, serving as vehicles of transition from one level to another.
Nom et adresse de l'enseignant:

Paul Darveau,
228 St-Pierre, app. 10,
Rivière-du-Loup.

Jacques Viel,
Route de la Montagne,
Notre-Dame du Portage,
Cité de Rivière-du-Loup.

Nom et adresse de l'école:

Ecole St-Pierre,
320, rue St-Pierre,
Rivière-du-Loup.

Titre du cours:

PROJET ECOLOGIQUE

Dans leur projet "Ecologie", MM. Paul Darveau et Jacques Viel tentent de préparer les élèves pour des excursions dans différents secteurs écologiques pour les aider à mieux saisir le contenu des cours en biologie 222 et 422, préparés par le ministère de l'Éducation du Québec. Les enseignants et les élèves préparent également du matériel audio-visuel sur un secteur écologique particulier.

Les méthodes suivantes sont mises en pratique dans ce cours d'étude, notamment:

1. inventaire des plantes et des animaux que l'on identifie pour apprendre le rôle qu'ils jouent dans leur secteur particulier;
2. étude de l'interrelation qui existe entre les végétaux et les animaux de chaque secteur écologique;
3. photographie de chaque spécimen;
4. rédaction d'un texte approprié pour identifier le rôle de chaque spécimen;
5. enregistrement sur ruban des bruits de chaque secteur écologique;
6. synchronisation des diapositives de chaque spécimen et du ruban précité; et enfin
7. établissement d'un questionnaire sur chacun des secteurs écologiques concernés.

Les enseignants ont remarqué l'extraordinaire enthousiasme des élèves pour cette façon particulière d'étudier l'écologie. Les élèves furent notamment très satisfait de préparer les présentations audio-visuelles découlant de leurs propres études.
Title:  

A BILINGUAL ECOLOGY COURSE FOR JUNIOR HIGH SCHOOL STUDENTS

The aim of "A Bilingual Ecology Course for Junior High School Students" is to teach ecological principles utilizing laboratory and field work. The source and resource materials are in both French and English. The topics are introduced in order, using local and familiar examples as follows: 1) abiotic and biotic factors in the environment, 2) food change, 3) biogeochemical cycle, 4) population studies and calculation of densities, 5) community relations, 6) ecosystems — field, woods, forest, lakes, cities, 7) man in the St. Laurent environment, 8) energy, 9) conservation and recycling.

Mrs. K. Currie, Sir Winston Churchill High School, St. Laurent, Montreal, P.Q. has included in her final report a long list of source and resource materials that she has collected for her course.

Mrs. Currie ends her report by stating that whether the course is being taught in a French school or in schools where French instruction is advancing, this bilingual ecology course can be modified to suit any region.
James Falcone and Kent Robinson, both of Dartmouth High School in Nova Scotia, were able to sum up their "experimental Grade 10 environmental studies program" with the following remarks:

1. Students were no longer faced with uninterested teachers who were assigned to teach material they didn't like, but rather with a team of concerned teachers who had chosen them as students;

2. Group and individual project work seems to have contributed greatly to the students' abilities to function independently by challenging them to think, plan, and organize for themselves;

3. The previously high drop-out rate from the Grade 10 general course has been significantly reduced.

The program that led to the above conclusions is an experimental program intended to provide the urban Nova Scotian student with an integrated program of studies that involves him actively with his particular environment, the environment of the city - centered around ever expanding social and physical problems - and the environment of change.

Among other things this program is inter-disciplinary particularly in the fields of English and Social Studies. In addition to these two subjects, but integrated less successfully, students also studied new courses in Science and Mathematics. A bonus resulting from the inter-disciplinary approaches is that it gives the opportunity to see teachers interacting with one another and the obvious total involvement of each teacher with the students in the program resulted in a warm and sincere student-teacher rapport. "Knowing
that they were special and that they were being taught by teachers who wanted to teach them provided these students with a sense of dignity that they had probably not experienced before, and certainly would never experience in the traditional general course program.
Name and home address of teacher:

Mr. G.M. Curle,
393 Martin Avenue,
Winnipeg, Manitoba.
R2L 0B9.

Mr. P.F. Weitzel,
705 Hoddinott Road,
Winnipeg, Manitoba.

Name and address of school:

Chief Peguis Junior High,
1400 Rothesay Street,
Winnipeg, Manitoba.
R2G 1V2.

Title:

AN ENVIRONMENTAL FIELD STUDY PROGRAM

Any Science teacher looking for lists of equipment necessary for a special project in environmental field studies will find the reports of Mr. G.M. Curle and Mr. Weitzel of Chief Peguis Junior High School in Winnipeg a most valuable document. These two Manitoba teachers intended to provide their 300 Science students with an opportunity to become aware of areas in their own province in which they could study the topography, ecology and human cultures. They took students to locations in the immediate vicinity as well as to the Whiteshell Provincial Park and the Churchill-Cranberry Portage areas of Manitoba.

This program had wide participation both of students and school staff as well as personnel from the University of Manitoba and personnel from several school divisions.

It is also noteworthy that the program provided the opportunity for students to acquire and demonstrate research and reasoning skills in a natural setting.

The final report contains the budget and lists of equipment used in the project. Such information, in itself, would be valuable to anyone contemplating a similar program.
Gary Alexander Woodhill’s “Individualized Science Program” at Robert Leckie High School in Goose Bay, Newfoundland, attempts to orient students to the discovery or activity approach to Science. His individualized junior high Science program accommodates a wide range of interest and ability levels in the classes and adds variety to the Science program.

Mr. Woodhill wanted to teach the students responsibility and decision-making by giving them some control over their own work in Science. The responsibility of each student includes setting personal learning goals. The motivation resulting from such responsibility results in increased learning and creativity.
Name and home address of teacher: 73—4—15
Mr. Neil K. Adams,
R. R. No. 2,
Group Box No. 5,
Compartment 23,
Hampton, Kings County,
New Brunswick.

Name and address of school:
Millidgeville North High School,
Boar's Head Road,
Saint John, New Brunswick.

Title:
113 GEOGRAPHY

Courses offered to non-academic and business education students are often very narrow on the academic side. Mr. Neil Adams of New Brunswick has written a non-academic Geography program in order to offer students enrolled in such programs a wider choice of subjects based on material that is obviously relevant to their every day life and interests. The course, therefore, was broken into three distinct, though related, sections: a) on map-reading, b) on Canadian geography illustrated with maps, and c) on local geography.

Mr. Adams, for example, dealt with map-reading by starting with exercises involving simple calculations of distance and direction and then moved on to contour lines and simple cross-sections. From this point he goes on to multiple cross-sections and the visualization of landscapes. The section ends with the construction of three dimensional block diagrams to give a pictorial representation of map information.

From map-making the students go on to study the iron and steel industry from raw material to the manufacture of automobiles. At each step students are required to work by themselves as much as possible.

The geography of the local area was approached entirely through field work.
Name and home address of teacher:  
Mr. Willard G. Dunlop,  
P.O. Box 516,  
North Vancouver, B.C.

Name and address of school:  
Handsworth Secondary School,  
1044 Edgewood Road,  
North Vancouver, B.C.

Title:  
PHYSICS FOR THE NON-SCIENTIST, PHYSICS II (BASIC)

Mr. Willard G. Dunlop of Hansworth Secondary School in North Vancouver has developed a Physics program for those Grades 11 and 12 students who do not require the more formal, academically-oriented Physics course currently offered in B.C. schools. This program stresses the unity of the unseeing world, the relationship between Science and society, scientists as people, and tries to reduce any aversion students may have toward Science. The textbook adopted for the course, Physics, An Introduction; Poets-Physics by Pollard and Huston makes use of the laboratory but also stresses the utilization of the school library for resource materials. Mr. Dunlop uses films, filmstrips, cassette tapes, guest speakers and field trips to supplement the course whenever any such deviser applies specifically to course content.

In response to an evaluation questionnaire, one student noted: “It allows those students who have little mathematics background to take a Science which they can understand as well as enjoy. The work is just the right amount to encourage interest, not boredom. The purpose of the school is to learn and not to be afraid to ask questions. This course does this.” Another student, “This Physics course gives me a good understanding of Physics without the Math. I really enjoyed doing written work like reports on scientists as people and writing up labs. I think it is a worthwhile course.”

As a result of the interest shown by students in this program, Hansworth Secondary School planned two classes of the new program for the 1973–74 school year.
Mr. Terence Lozynsky and Mr. Wayne McAuley have developed, in Toronto, a peer counselling project. The purpose of the project is to train students in counselling skills. It was the hope of the teachers that students, as a result of the training, would be good counsellor helpers.

At the beginning of the first semester, senior high school experimental and control groups completed the Kohlberg Scale of Moral Development and the Loevinger test which measures ego development. The hypothesis was that students who participated in the special training program would change more significantly than the control group in terms of the scales resulting from the administration of the tests mentioned above.

In addition to the training program, field work with Grade 8 students was planned, but it was not possible to bring about this aspect of the program.

In any case, both Mr. McAuley and Mr. Lozynsky are convinced that there were very positive aspects to the program and will be continuing further experiments in the future.
Marlene Morgan of Port Coquitlam, B.C. designed a new Guidance program for her 140 female students at the Grade 10 level at Kensington Secondary School in Burnaby. Marlene was faced with the same difficulty with which so many Guidance teachers are faced, that is, what do you do with a two hour per week period that may, or may not, take place at all depending on what else is going on in the school? In response to the challenge she decided to divide the program into six core areas: attitudes, women in our time, the future, styles of living — choices and alternatives, women and the law — a Canadian perspective and, what do children learn? A seventh aspect of the program involved student projects in which the students were encouraged to explore an aspect of the course which they found particularly interesting or relevant.

Some sample student comments "It (the role of women) was very interesting and it proved that we are equal and we can get recognition for things we want if we try."

"Our trip to talk with the Indian lady was the most significant thing we did."

"I think it is interesting to hear all the things about women's role but I still think women have a good life being looked after by men."

"The Guidance program helped me understand certain types of people in the world who are discriminated against like Indians, Negros and women."

"It was interesting to see what boys think of the role of women."

In short, this project is about women in a changing world — a guidance project designed for "consciousness raising" — the development of awareness, a course which provides learning experiences which are relevant to current issues.
Mr. Robert L. Bishop of Gillam, Manitoba, has developed a project which he has entitled: Northern Adventures (Forts, Guns, and Ships!). Mr. Bishop's purpose is to correct the current opinion that Manitoba was opened from the East. More properly, he wants to show the children of Northern Manitoba that the movement really began in the North. He also, of course, wants to demonstrate that his area is a rich storehouse of history, both Indian and European.

In order to do this, the teacher has compiled a kit complete with tapes, slides, selection of work-cards and a teacher's guide. He has tested the kit in a Gillam school and Alonsa school, both in Manitoba.

In order to make the program as usable and interesting as possible Mr. Bishop has provided for travel by canoe and boat on various northern Manitoba rivers.

There will be a great number of richer Grade 10 and 11 students in Gillam, Manitoba, as a result of this project.
Title:

COMMUNITY PROBLEMS

In order to acquaint the average high school student with his community and the larger society and to develop in him a concern for his fellow man and his world led Mr. Terrance Carson of St. Stephen’s Central High School to develop a program entitled “Community Problems”. The program is an effort to meet the growing demand for topics of urgent interest which should be dealt with in school.

In general terms, the program emphasizes five areas: current events (news and media, civics), government, law, unions, and the future. Mr. Carson’s report details the methods and procedures used in each area and the problems that the teacher developing such a program is bound to encounter.
Le but du présent projet est d'engager la participation d'élèves d'écoles secondaires à un programme qui leur permet d'acquérir une certaine expérience dans l'élaboration, l'administration et les rapports qu'exigent les maisons d'affaires. Les élèves habitent un secteur rural où les professions principales sont agricoles et industrielles. Le tourisme a connu un bel essor dans le secteur, ce qui a poussé plusieurs familles à se lancer en affaires sans trop connaître les principes de base qui régissent l'exploitation d'un commerce, qu'il s'agisse d'une maison familiale de touristes, d'un hôtel ou d'un restaurant.

Dans le cours dont il est ici question, les élèves sont engagés dans quatre projets fondamentaux. En premier lieu, trois groupes d'élèves forment chacun un conseil d'administration. Ce conseil entend un cas que lui expose l'enseignant à la suite de quoi les membres du conseil étudient l'opportunité de l'entreprise, les marchés, les sommes d'argent disponibles, le personnel et la mécanisation. Ensuite a lieu l'évaluation de tous ces éléments pour juger de l'opportunité de l'entreprise.

En deuxième lieu, les élèves étudient la situation socio-économique de leur région, qui comprend le budget familial et, de même, le marché de l'autoneige que fabriquent sept différentes entreprises du milieu.

Troisièmement, M. Lamarche et ses élèves fondent un laboratoire d'analyse financière au sein duquel un certain nombre d'équipes d'élèves consultent des revues et des journaux pour retracer l'histoire de l'industrie au Québec et les classent pour les retrouver au besoin.

La quatrième méthode que suit M. Lamarche vise à intégrer les élèves aux activités commerciales et financières de l'école elle-même. Par exemple, une coopérative d'élèves a été instituée au sein de laquelle les
élèves ont accompli des tâches quotidiennes dans l'école même y compris une partie de l'administration du budget scolaire. Ils sont en outre entrés en concurrence avec des organismes de l'extérieur pour présenter des soumissions prévoyant l'entretien de l'extérieur de l'école, dont l'aménagement des terrains, des plates-bandes, la tonte du gazon, le soin des arbres, l'enlèvement de la neige, etc. L’offre des élèves ayant été acceptée, ils ont dû acheter un tracteur, des tondeuses de gazon, etc. En outre, ils ont exposé des livres, des peintures, de la céramique et prélevé assez d’argent pour l’installation à l’école d’une télévision en circuit fermé.

En résumé, les élèves ont obtenu de meilleurs résultats autant dans les examens de l'enseignant que ceux de la province, au regard des élèves qui avaient suivi les cours réguliers de l'école l'année précédente. M. Lamarche est d'avis qu'une telle situation provient surtout d'une meilleure attitude envers l'école, qui résulte en une participation plus intense des élèves à l'action de l'école et de la collectivité.
Name and home address of teacher:

Isabelle Zoobkoff,  
967 Northmout Drive N.W.,  
Calgary, Alberta.

Name and address of school:

Richmond School,  
2701 – 22 Street S.W.,  
Calgary, Alberta.

Title:

MONEY MANAGEMENT A LA BEHAVIOR MODIFICATION

Students, aged 11 to 13 years, can learn to manage money. Isabelle Zoobkoff of Richmond School in Calgary is convinced that they can providing the setting for learning is realistic and of immediate importance to the children.

Mrs. Zoobkoff’s program is divided into four stages, each succeeding one being more complex than the former. In stage one, the students, upon being paid immediately for work done, develop the skills of making change. In stage two, the students, on a daily basis, learn to add sums of money, sub-total, and accumulate totals and start a ledger. During stage three, bank practices are learned by visiting a local bank and then transferring some of the procedures to their own work in the classroom. In stage four, the students learn to keep records of their money transactions, to graph money and extend their knowledge of banking to checking.

The program outlined above was developed for a year-long program. It can, of course, be successfully adapted for shorter time periods such as two months. In general, the students responded very well to the program and enjoyed doing their more tedious jobs in the classroom because of the added benefit of purchasing power.