Documented here is a project involving three extensions or adaptations for using volunteers in schools. The first adaptation involves a plan for meeting certain major needs of a secondary school with volunteer help. This plan includes components designed to reorganize the secondary school curriculum to allow some of the students to study aspects of early childhood education and apply these studies through service in nearby elementary schools. The second adaptation studies the role of volunteer activities in a school wherein a modified differentiated staffing plan is already in effect. The outcome of this study is a description of the roles or functions performed by the various levels of staffing, including volunteers. The third adaptation deals with a plan for increasing the amount of volunteer help in an individualized reading program that led to a plan for vertical integration of classes. The report contains one section with chapters that deal separately in considerable detail with the three programs, present evaluation data, and offer suggestions for further implementation and adaptation. An appendix provides a general bibliography, the operational model, and other materials currently being disseminated to schools desiring to establish volunteer programs. (Page 106 may reproduce poorly.) (Author/MLF)
EXTENDING VOLUNTEER PROGRAMS

IN SCHOOLS

H. G. Hedges

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3.

INTRODUCTION

This report documents a project involving three special extensions or adaptations of the general plan for using volunteers in schools. The project was funded for the year 1972 - 1973 through the office of Research and Development at The Ontario Institute for Studies in Education, and was funded under contract with the Ministry of Education for the Province of Ontario. The main aspects of the project were conducted in schools of the Niagara Region, and in addition, one of the programs involved schools in Halton County.

The report contains three main sections: (a) the present introduction which describes the background to the present study; (b) three chapters dealing with the three major extension activities, which are the heart of the present study; and (c) the appendix which contains a wide range of the manuals, operational model, and other materials currently being disseminated to schools which wish to establish volunteer programs.

The main part of the present report, comprising chapters 1, 2, and 3, describes three independent extensions of the general model. Each of these extensions was conducted in a single school or in a group of cooperating schools. In each case the report for the school identifies the nature and needs of the program, the organization of the volunteer activities, the important phases of the project itself, evaluation procedures and the major outcomes. Some suggestions are made concerning the adaptation or application of the plan to other schools.

The purpose of this introduction is to indicate the origin of the project and to describe briefly the activities that have preceded the present project.
This project represents the fourth phase in a long-term study of volunteers in schools. Each of these phases has involved one or more research activities, the development of materials for use in schools, and broad-scale dissemination. The dissemination activities have now involved over one thousand schools in the Niagara region and in other parts of Ontario.

A brief description of the four phases of the study to date is provided in the section that follows.

(a) Niagara Survey. During the school year 1969-70 a major intensive survey of the use of volunteers was conducted in the Niagara region. The results of this study are reported in the monograph entitled Volunteer Helpers in Elementary Schools. The survey documented the extent of volunteer help in a sample of one hundred schools. It was discovered that forty-eight percent of the schools had at that time some level of volunteer activity, and approximately half of the remainder expressed an interest in establishing a volunteer program. An even more important long-term contribution of this study was the taxonomy which was developed in order to classify into various classroom functions the tasks which volunteers performed in the school. This taxonomy, which enabled all tasks to be classified objectively into appropriate functions, was revised in subsequent studies and became the basis for the observation instrument used in the present study. The taxonomy had the further value of giving principals and teachers a broader vocabulary for descriptive volunteer activities than had been used previously. In fact, a study of the previous descriptions of volunteer activities implied that the activities of the classroom were seen by principals and teachers as being basically of two kinds, one called "actual teaching" and the other...
called "supportive tasks". The use of the taxonomy readily established that many of the tasks in the classroom cannot be neatly categorized in either of the two broad groupings used by principals and teachers, and demonstrated that it was essential to have some more specific categories which would enable all activities of volunteers to be classified in terms of the function performed.

As a follow-up on the Niagara survey a more extensive survey of volunteer assistance was conducted throughout the province in the 1970-71 school year. Forty boards were selected as a representative sample study group. From this survey it was established that approximately fifty-two percent of the schools at that time reported that they had some form of volunteer assistance program. In almost every respect the picture for the province was roughly comparable to that for the Niagara region. It was found, for example, that the average number of volunteers per school in both studies was approximately nine volunteers, and also that the average amount of service per week for each volunteer was approximately one-half day. The results of these surveys indicated that the one-half day period is both the desirable and natural amount of volunteer help to be expected from parent volunteers. The provincial survey revealed that a few boards had no schools with volunteer programs at that time, and that a few boards had volunteer programs in all their schools. The remaining boards ranged from zero to one hundred percent with respect to the number of schools using volunteers. A rather surprising discovery from the survey was that a reasonably large number of schools had very large volunteer corps, often exceeding thirty individuals.
6. Both the Niagara survey and the provincial survey convinced the research team that there was a widespread interest in the involvement of parents and other volunteers in schools, and even more importantly, established that schools which had set about deliberately to develop a comprehensive program appeared to have little difficulty in recruiting reasonably large numbers of interested volunteers.

(b) The Operational Model. An analysis of the volunteer program in a large number of schools, coupled with the study of the stated needs in schools with respect to possible volunteer help, indicated that many volunteer programs were not developed on a planned or systematic basis, and often were not directly related to the stated needs of the school. As a result of this apparent gap between needs and program, the officers of Niagara Centre established an operational model whereby a typical school could implement a comprehensive volunteer program if it chose to do so. The model was tested in a number of schools during the school year 1971 - 72. The model, which is included in the appendix of this report, has six main phases (readiness, recruitment, training, maintenance, evaluation and extension), and further breaks each phase down into a series of chronological steps which should be followed in planning and implementing a volunteer program. The model also identifies the person or group who would assume the major responsibility for initiating or conducting the particular step or sub-step of the model.

The first three schools in which the operational model was tested and implemented had widely different characteristics. During this period the officers associated with the project worked on a fairly intensive basis
with the principals and staffs of the three schools. These activities included initiating activities, studying and applying various steps in the model, and a continuous monitoring and evaluation of the work of the volunteers and of the effectiveness of the model itself. Evaluations were conducted to determine the success of the program as seen by the principal, the staff, the parents, and the students. In one of the schools a complete evaluation project, including an evaluation of pupil gain was undertaken, and it was concluded that the total program of the school resulted in significant gains over three control schools. In addition, a detailed study was made, based on approximately 150 teacher days, of the effect of volunteer help on the time that teachers allocated to various functions. Using the revised taxonomy referred to above, a standard observation model was created and used in connection with direct observation in classrooms. In this study it was established that on the days in which volunteer help was used in the classroom teachers tended to double the amount of time devoted to upper level or professional activities, and the total amount of direct individual help given to students by an adult (teacher or volunteer) was almost quadrupled. It was contended that these two benefits, a doubling of teacher time in upper level functions and a quadrupling of adult time given to individual students, both represented major advantages of volunteer programs with respect to meeting commonly stated needs or shortcomings of the typical classroom.

Another outcome of the implementation of the operational model was the development of various materials which principals, teachers, and volunteers would use in one or more of the phases. As indicated above, some
of these materials are found in the appendix of the present report.

It was apparent both in the original study schools, and in the schools in which further dissemination was conducted, that the prime objective of volunteer programs; at least in the minds of teachers, was the direct additional help that they would receive in the classroom. The notion that the possible improvement of parental attitudes and the improvement of communication between the home and school would be significant outcomes, or objectives of the program apparently had not been seriously considered by the teachers. Therefore, in the various documents some attention is given to questions of the improvement of parental attitudes and improved communication between parents and teachers.

In order to document the original implementation of the model, and to assist in the dissemination of the general model, a film entitled *In Loco Magistris* was prepared as a joint activity of Niagara Centre and the Ontario Educational Communications Authority. This film, selected as one of the five audio-visual presentations to be used at the Banff Conference in October 1971, has become the best known film on volunteer assistance in schools in Canada, and has been widely used throughout this country and the United States. The film has been used over two hundred times during each of the years since its original production and has been used several times in television series on innovations in schools.

The implementation of the model in the three original schools and in a large number of schools in the dissemination phase made it evident that there are many other specific needs in schools in addition to general classroom assistance that could be met in part or fully if an adequate compre-
hensive volunteer program were established and maintained. The identification of some of these major needs of schools and the development of adaptations of the general model to meet these needs formed the basis for the third and fourth phases of the long-term study.

(c) The First Three Adaptations. In a project funded by the Ministry of Education the first three major extensions of the model were implemented in the 1971-72 school year. These three studies became the subject of an informal publication of Niagara Centre of The Ontario Institute for Studies in Education entitled *Using Volunteers in Schools.*

The first extension of the volunteer program was implemented at Fessenden Public School, Ancaster, as a means of enabling the staff to become a curriculum development team. It was found that the general volunteer program could be adapted to provide the staff with as much as two hours per week for curriculum development, with the volunteers, who were mainly parents, providing the administrative and supervisory support required so that teachers could be absent for various periods of time from their classrooms. No negative results of the study were discovered. The school in question has continued its volunteer program into the present school year. Considering the growing importance of curriculum development at the county, local, and school level, the findings of this program may be expected to make important contributions to alternative approaches for freeing teachers to work on curriculum; perhaps as many as fifty percent of elementary schools could adapt volunteer programs to this important need.

The other large scale need that was tested in relation to a volunteer program was the intent expressed at St. Daniel's Separate School in
Hamilton to integrate the special education program into the regular curriculum of the school. This school had already developed a basic parent volunteer program, and it proved relatively easy for the principal and special education teacher to adapt this program to meet the needs of special education in the school. In the process, more pupils were dealt with on an individual basis than had been the case in the previous year.

The program for parental involvement in the special education program required four special elements -- a comprehensive testing program for all pupils; assignment of volunteers to classrooms to enable teachers to prepare student profiles; a systematic organization of the profiles to determine the pupils who required special education at various times; and a flexible but thorough plan for providing daily the specific additional instruction required by individuals. This adaptation was evaluated by the staff as being highly successful both in meeting the needs of special education in the school and of reducing the negative feelings that many youngsters usually have as a result of being identified as having special education needs.

The third adaptation of the parent volunteer model explored a plan whereby teachers could spend significantly larger amounts of time in the most critical classroom functions of planning, interacting with individual students, determining students' readiness and initiating and consolidating important new mental structures. This program was implemented in Victoria Public School, St. Catharines, and was conducted in keeping with a rigorous experimental design including systematic pretest and post-test evaluations of pupil growth.
In this adaptation it was found that the teacher learned to transfer more than fifty percent of her time to upper level functions, and that most of the supportive and low-level instructional work could be done competently by parent volunteers. In this situation the amount of individual attention received by each pupil was multiplied several times. The results as expressed in pupil gain were in some instances dramatic. The study documented gains of more than a year in all the major objectives tested, with gains as high as a 2.0 years average in areas such as reading comprehension. It was noted that the greatest gains were made in those areas in which the volunteers spent large proportions of their time.

(d) Three Further Extensions. The fourth phase of the general study, which is documented in the present report, involves three additional extensions of the general model. Briefly, the report and project deal with three distinct programs.

Program D involves a plan (somewhat modified in practice) for meeting certain major needs of a secondary school with volunteer help, and includes four components designed to reorganize some aspects of curriculum in the secondary school so that some of the students can study aspects of early childhood education and can apply these studies in service in nearby elementary schools.

The second program, entitled Program E, studies the role of volunteer activities in a school in which a modified differentiated staffing plan is already in effect. The outcome of the study is a description of the roles or functions performed by the various levels of staffing, including volunteers.
The third program in the present study deals with a plan for increasing the amount of volunteer help in an individualized reading program in order that the individual needs of pupils can be met at the proper stage of readiness. Such a plan in operation involved some reorganizational aspects of the grade structure, and in the present study led to a plan for vertical integration of classes.

The following three chapters deal separately in considerable detail with the three programs referred to above, and present evaluation data and suggestions for further implementation and adaptation.
Chapter 1

Secondary School Students as Volunteers in Elementary Schools

For many years there have been isolated examples of secondary school students assisting in specific ways in nearby elementary schools. In general, such activities have been viewed by the staff of the secondary school as being unrelated to the secondary school curriculum and of being of benefit essentially to the elementary school teachers and children. Despite a growing body of research, mainly in the United States, establishing that when secondary school students assist as volunteers in elementary schools they make important academic gains, such research has apparently had little or no effect in Ontario in terms of any large-scale movement toward encouraging secondary school students to serve as volunteers in elementary schools. In brief, existing programs of secondary school volunteer assistance are based on the benefits students give to others rather than the gains that they themselves might potentially achieve. Further, in most programs in which secondary school students serve as volunteers in elementary schools their volunteer activities appear to be completely unrelated to their secondary school studies.

The purpose of the first program in the current project, entitled Program D, was to determine whether a comprehensive volunteer program could be established in secondary schools, whereby large numbers of secondary school students could work in nearby elementary schools in activities that were deliberately related to their secondary school studies and which would enhance the volunteering students' achievement.
It was assumed that the development of such a plan would be facilitated if the author also assisted the secondary school staff to develop or enlarge the parent volunteer program within the school and to assist the school in exploring the larger pool of talent that would be available to the school. In planning the program then, four main components as follows were conceived:

(1) A procedure for categorizing the activities of secondary school teachers in the classroom and organizing these activities into a classification system which would enable the teachers to define more precisely the appropriate roles of teachers and of volunteers. The existing taxonomy of classroom functions would be tested and modified through observation, analysis and discussions with teachers.

(2) An exploration and identification of the total pool of talent in the community, including parents, business and professional people and CAAT and university personnel (including students) followed by an assessment of their potential contribution as volunteers in secondary schools.

(3) The development and introduction of a unit on early childhood education as part of an existing sociology course at the grade 12 level.

(4) The induction of the students in (3) above as volunteers in a nearby elementary school or with individual students at the grade 9 or 10 level within the school.

An invitation to implement some aspects of this program was received from a number of schools in Halton County. At approximately the same time Mr. Ronald Cussons was assigned for a four-month period to study the role of volunteers in Halton County schools prior to his appointment as an ele-
mentary school principal. Because of Mr. Cussons' own interest in exploring the role of secondary school students as volunteers, in addition to his more general interest in the subject of volunteer help in schools, the author decided to accept the invitation to work with him in the Halton system to explore the role of secondary school student volunteers. So successful was Mr. Cussons in developing volunteer programs that he was able to obtain additional financial assistance through the Local Initiatives Program, so that a number of assistants were employed who helped in the organization of various volunteer programs and in particular assisted in the data collection for the current project. As a result we were able to increase several-fold the amount of direct observation in classrooms. Mrs. Ginny Hopkings devoted many days to structured interviews with secondary school student volunteers and their teachers in both the secondary and elementary panels. A copy of the questionnaire employed is found in the appendix. Mrs. Margaret Mann was employed for approximately forty days in collecting the data on the effect of volunteer help on teacher performance described later in this chapter and documented in Tables 1 to 12 of this report.

The cooperation of Mr. Cussons and the involvement of these special assistants resulted in a much more broadly based study than had been anticipated in the initial stages.

A second benefit derived from cooperation with Mr. Cussons was the fact that he and his assistants were willing and able to take over those components of the plan which related specifically to parent volunteers within the secondary school. Most of the secondary schools involved in the study have had ongoing volunteer programs for some time, with volunteers
working mainly in library resource centres and in supportive activities in a number of subject areas.

With this cooperation it appeared unnecessary to devote any major part of the project's activities to further development of the volunteer programs within the secondary schools or in fact to explore further the talent pool in the local community. Instead, it enabled us to devote our energies in the program mainly toward the involvement of secondary school students as assistants in elementary schools and to designing procedures for documenting and describing their activities.

It was found that staff members of the secondary schools, both as individuals and as members of departments, expressed considerable interest in the question of secondary school students working as volunteers in elementary schools, particularly in view of the possibility that some topics within the curriculum could be applied in such activities. The original intention of developing a course in sociology in order to provide both the background and the time for students to serve as volunteers appeared to be unnecessary, at least in the initial stages, because in each of the schools in which we worked we found adequate numbers of staff members who were prepared to relate their own subject to the role of their students as volunteers. It seems both logical to suggest that as the role of secondary school student volunteers expands this activity should be recognized more formally in the secondary school curriculum, and one means of doing this would be to provide a course which would give some background in early childhood education.

In the meantime, more evidence may be required concerning the functions that students can perform effectively as volunteers, in order that the proposed course can be closely linked to practical applications.
Through the efforts of Mr. Cussons and his assistants volunteer programs for secondary school students were developed in several of the high schools in Halton County. For purposes of the present program two of the high schools in particular were selected, namely M. M. Robinson High School in Burlington and Blakelock High School in Oakville. In addition, less formal studies were conducted with students in Lord Elgin and General Wolfe High Schools.

In each of the high schools staff members were invited to participate in the program and to identify areas in their own courses which would have a direct relationship to volunteer activities in nearby elementary schools. Naturally, the greatest amount of interest in this type of linkage was forthcoming from areas where an apparent relationship already existed, in particular physical education, art, music, and geography departments. In addition, the English, mathematics, home economics, technical, business, science, sociology, and history departments of various secondary schools become involved in the project. To some degree the extent of involvement was related more to the interests or commitments of senior personnel than to the identity of the department itself. For example, the head of the history department in M. M. Robinson High School showed considerable interest in the topic and assisted in developing the plan used in that school.

In setting up the project it was agreed that additional periods would not be given to students in the initial year for volunteer work, but that they would have to conduct such activities within the periods formally assigned to the subject or in spares and other free time. Also, students required approval for their activities from their secondary school teachers. It seemed wise in the initial stages to avoid criticism from teachers of
other departments who might not feel the same commitment to the project as those departments from which the students were recruited; therefore, every attempt was made to avoid problems relating to attendance in other departments.

In the two schools representing the heart of the study the nearby feeder elementary schools were approached, and were found to be very enthusiastic about the plan. For M. M. Robinson, seven feeder schools were located, six public and one separate, all but one within two miles of the high school. In the Blakelock area eleven feeder schools were involved, eight public and three separate.

In order to explore some of the administrative problems involved in matching secondary school staff interests, student participation, and the identified needs of elementary schools, two distinctly different models of organization were employed.

The program at M. M. Robinson High School was organized around needs of the elementary schools. The staffs of the elementary schools were asked to state needs which they felt could be met by secondary school involvement, and to assemble this information on data sheets. These included the kind of help they wanted, proposed departments of the secondary school from which this help could be drawn, the grade level to be served, the number of students they could employ, the time of the day and week they wished this help, etc. These requests from the elementary teachers were assembled and given to each department of the secondary school. The departments made this information available to students, and invited students who felt they could match some of the needs identified by the elementary teachers to contact the appropriate
school or teacher and to discuss working with them on a mutually agreeable basis.

In Blakelock High School the plan for dove-tailing needs of the elementary school and the interests and competencies of secondary school students was organized in exactly the opposite direction. In this case secondary school students completed a student volunteer biography sheet including pertinent information as to the sponsoring department, a grade level in which they are interested in working, the times available for volunteering, the type of tasks they would like to do in the elementary schools, the preference of elementary schools, etc., along with any special interests, hobbies or talents that the student might share with younger students. These information sheets were organized according to the schools of preference and made available to the staffs of the elementary schools. The elementary teachers examined this pool of talent available to them and selected particular students whom they contacted for assistance. This model arranged for the elementary teacher to choose the student whom he wished to involve, whereas in the Robinson model the student was in effect selecting his teacher.

In each of the two models described above considerable success was achieved in matching secondary school students with elementary teachers. In each instance well in excess of one hundred students and a comparable number of elementary teachers were involved. One can see advantages to each of the models. The Robinson model theoretically provides for a wider range of needs to be identified and met; however, it was found that the actual jobs that elementary teachers suggested often were not clearly defined, with the
result that students often failed to volunteer for some of the needs that were identified. In the Blakelock model theoretically the plan provides for meeting the interests of the secondary school student more fully; also, if enough biographical sheets were available for each elementary school many or most of the needs of the elementary teachers would also be met. These advantages are further discussed in the section on teacher evaluation.

In both projects plans were instituted to ensure that there was communication between the high school department and the elementary school teacher, in order that the department would know where the student was working, what his function was, etc.

In addition to the information given in the evaluation section that follows, certain advantages of the models described above are evident, when compared with less structured programs in existence in other secondary schools. First, these programs were based on a matching of student interests and teacher needs. Secondly, they provided for a commitment or contract between the student and the teacher and for regularity of attendance and service. Third, the identification of the activity with the curriculum of the secondary school department has obvious merits, the potential of which has not as yet been fully explored. It was evident that from some departments students were able to apply knowledge and skills that they were developing in their secondary school classwork. In other cases there appeared to be relatively little relationship between the academic aspects of their high school program and the function being performed in the elementary school. Even where no such match could be observed, one must consider the values to the student in the affective areas of his growth.
In these two programs credit in the secondary school subject was given for various kinds of volunteer service in the elementary school. This formalized the relationship between the department and the elementary school and gave supportive recognition to the activity. In some cases the student reported by essay or other form to his secondary school teacher.

Perhaps it is natural for secondary school departments to commence volunteering in keeping with a model such as one of the ones described above. The more formal development of a course or unit in secondary school directly related to instruction in early childhood education, with volunteering an integral part of such course, may be a second phase. In any event, the author found relatively little enthusiasm on the part of secondary school teachers toward preparing a course and submitting it for approval to the appropriate authorities. No doubt their feeling was that they would like to have some experience with students as volunteers before committing themselves to a large scale formal course on early childhood education and volunteering.

TASKS PERFORMED BY STUDENT VOLUNTEERS

An ideal arrangement for volunteer service by secondary school students would be to have all activities relate to the academic work of the student and the development of affective characteristics and arranged to meet the classroom needs of elementary school teachers and pupils. These three criteria were in fact attained to a very large extent in the program; however it is natural that at times only one or two of these criteria were met. The elementary teachers' identification of needs in the classroom which volunteers
might fulfill at times did not take into consideration the academic growth of the student. Similarly those activities which were most valuable to the secondary school student as a learner would not in all cases have been particularly useful to the elementary teacher. No doubt in further extensions of plans for involvement of secondary school volunteers frank communication between the secondary school and the elementary teacher with respect to the most worthwhile contributions of the secondary school student and the most pressing needs of the elementary classroom will help to resolve any mismatch that may occur in the kind of service rendered.

The observer teams and the assistants who conducted the structured questionnaire found a very wide range of tasks performed by secondary school students in the participating elementary schools. An examination of a sample list of typical tasks performed shows that various functions of the elementary school teacher were in fact performed by the volunteers. Such functions as initiating new learning, consolidating new learning, adding content to existing mental structures, drill, review, listening to students read, supervising classes or groups, remedial instruction with individual students, supervising playgrounds, conducting children on field trips, marking pupils' work and performing a myriad of semi-technical and non-technical tasks were representative of the activities of the students. The following is a sample of the statements by students and teachers of the activities of these volunteers; these are taken directly from the report forms:

- maintaining audio-visual equipment
- taking groups on field trips
- taping stories
- teaching children to use audio-visual equipment
-- taking a science inventory
-- supervising experiments
-- listening to pupils read
-- teaching girls cooking
-- helping individual pupils with math problems
-- supervising an art lesson
-- supervising a classroom
-- helping with coats and boots
-- taking attendance
-- demonstrating physical education
-- refereeing games
-- helping individuals with research reports
-- conducting a discussion about a film
-- filling pupils' records
-- conduction flashcard drills
-- testing visual and auditory discrimination
-- supervising the playground
-- marking spelling and mathematics
-- demonstrating art techniques
-- typing pupils' stories
-- teaching geography lessons
-- conducting science demonstrations
-- preparing a library card catalogue
-- carding and shelving books
-- conducting word drills
-- reading stories to pupils
-- conducting group discussions
-- organizing a fashion show
-- helping rehearsal of a play
-- helping pupils with homework problems
-- typing library reports
-- dictating spelling
-- running dittos
24.

- preparing a bulletin board
- teaching a drama group
- supervising social events
- teaching a cooking elective
- teaching visual perception games
- teaching pupils to serve on school council
- remedial reading
- supervising bus routines
- teaching lessons on grooming
- lunch room supervision, and
- helping administer Frostig program.

No attempt was made to catalogue the amount of time that students spent on each of these or on numerous other tasks in the classroom. The most complete information available on the distribution of students' time will be found in the evaluation section of this chapter, specifically in Tables 5 and 6 which give a breakdown of students' time allocations to various classroom functions for a selected group of students for whom detailed observations were compiled. A discussion of this breakdown of student time is provided at the appropriate section of the evaluation comments.

EVALUATION

(a) Administrative Considerations. As indicated above, both plans for the administrative treatment of secondary school volunteer assistance appear to work satisfactorily and to have certain advantages. In order for either plan to operate some evidence of interest and commitment by departments in the high schools is required, and elementary teachers must be prepared to identify various tasks or needs in their classrooms which they foresee as suitable areas for involvement by secondary school students. The match between the academic values to the secondary school student and the manpower
advantages to the elementary teacher cannot be matched adequately through any administrative procedure above. Both plans will go part way toward dovetailing these two needs, but face-to-face communication between the volunteer and teacher, and open conversation concerning the success of the student's activities appear to be the only means of ensuring that both needs will be met to a reasonable degree.

Provided that the two components referred to above are met, and provided that there are feeder elementary schools within a reasonable distance of the secondary school, there seems to be every reason to suggest that a plan of either type could operate in almost any secondary school. In the initial stages it seems probable that teachers will restrict the volunteering services of their students to those areas and times that relate specifically to their own subject areas. As evidence grows about the benefits of volunteer programs to the secondary school students themselves, it well may be that many secondary schools will provide more flexible opportunities for students to assist in elementary schools. This may involve special time-tabling arrangements at the secondary school level, the identification of volunteering as a bona fide activity in the secondary school, or provision of more individualized time-tabling approaches so that students can themselves work out to a larger extent the arrangements for providing volunteer help in nearby schools.

(b) Attitudes of Student Volunteers. With the use of the student volunteer anecdotal interview form, which is shown in the appendix and which was used as the basis of a structured interview, it was possible to obtain evidence of perceptions and attitudes from a very large number of secondary
school student volunteers. In the questionnaire students were asked for their reasons for becoming volunteers, for evidence of what they have learned as a result of volunteering and evidence of ways that they have been changed as a result of these activities. They were also asked to estimate or describe effects on the elementary school students resulting from their own help.

The interest, enthusiasm and complete approval of the concept of volunteering as stated by the volunteers themselves in the most striking aspect of the interview forms. Almost all students indicated evidence of what they regard as important benefits to themselves both in what they have learned from volunteering and of information about changes in their own academic work or attitudes. Perhaps it is not surprising to find these responses to be overwhelmingly positive, in view of the fact that volunteering was in a sense a self-selecting process which probably resulted only in those with reasonably positive attitudes and commitments becoming involved. Even when one allows for this probability one is impressed with the outspoken support and interest of the students as stated on the interview forms.

Among the reasons given by students for becoming volunteers were a desire to help others, a desire to improve the elementary school program, a desire to help meet identified needs in elementary schools, a wish to know more about elementary children, a chance to see if there might be a future career in teaching, an opportunity to apply some of the things learned in secondary school courses, a desire to be helpful to others, and an opportunity to make interesting use of spare time.

In response to the question about what the student learned from his volunteer work the most common responses had to do with techniques for learning
27.

Many students also indicated that they had to learn to be responsible, to learn to organize and plan work more effectively and to analyze learning difficulties in greater detail. The most common single response was that they learned a great deal about children.

In response to the question concerning how volunteering had changed the respondents, many of the students commented on career opportunities, stating that their volunteering had helped them try out skills or test out their own ideas about various occupations such as audio-visual technician, teacher, social worker, etc. A large number of students commented on changes in attitude and behavior toward their own secondary schoolwork. Some of them said that they had learned to "grow up"; others commented on the development of tolerance, patience and responsibility. A large number of students commented on the confidence that they developed in the program. Another common theme was the understanding and appreciation of the complexity of a teacher's role. Also commonly expressed were evidence of feelings toward children and particularly to children with learning difficulties. A remarkable number of students stated that "It was exciting"; "I liked helping children"; "It made me feel good"; "It made me feel I was doing something worthwhile for others." Such evidences of fulfilment and changes in affective learning for some students were the most significant outcomes of their volunteering activities. A number of students commented on what their volunteering activities had produced in terms of their own behavior. In addition to statements concerning planning and organization many students commented on what they have observed about learning independently, about analyzing their own learning difficulties, about the value of drill and review, and
about the value derived from teaching someone as a method of learning.

Almost all the students interviewed had positive, and some also had critical, suggestions for improving the volunteer program. A common theme was the need to have more opportunities for volunteer service over an extended period of time. The frequency of this statement tended to support the students' statements about advantages and attitude changes. Some students observed that there would be value in some instruction about learning techniques, individual differences, levels of child development, etc. A common complaint was that teachers often had not organized adequately for the volunteering opportunity that they provided. A few students commented that the elementary school was not challenging students adequately and was not providing adequate opportunity for individual treatment. A few students indicated that they had not been given meaningful activities, and provided supportive evidence for such claims.

Altogether an analysis of the numerous student interview forms convinces the reader that almost all the students enjoyed their volunteering activity, were able to identify advantages to them as individuals in both cognitive and affective areas of their growth, and would like to continue or expand their volunteering service.

Although no formal evaluation was conducted concerning the attitudes of elementary students to the volunteers, many of the volunteers themselves observed that the elementary school children liked them, appreciated what they were doing, and frequently asked when the secondary school student was coming back to their classroom.

A number of students commented on improvements in their academic
progress which they attributed to volunteering. Some claimed gains of a
grade (A, B, C, etc.) over their previous record in various subjects. This
perceived advantage was discussed by two students who were asked to describe
their activities on the CBC National Radio program "This Country In the

(c) Evaluation by Secondary School Teachers. Because the period and
frequency of voluntary activities by secondary school students varied from
student to student as well as between departments and schools, and because
there was no means of obtaining adequate pre-test scores for the very large
number of students involved, it was not possible to document statistically
the gains in academic components of the work of the students. Lacking such
documented evidence, we have had to rely on statements of the students
themselves and comments by their teachers. Reference is made in an earlier
section the students' perception of their growth. Most of the information
obtained from secondary school teachers was collected from informal inter-
views and conversations with secondary school personnel. These discussions
confirmed the student's own perceptions of their changes in the affective
areas of their growth. Teachers commented on the growing sense of respons-
sibility, confidence and interest in school work, as well as improved planning
and organizational patterns. Most of the teachers with whom discussions were
held were receptive to the idea that academic gains were probably being
made as well, but insufficient evidence was available for reaching any con-
clusion comparable to that derived in some of the more formal studies on the
question in the United States. Some of the teachers believed that gains could
be expected and were achieved in those situations in which the student was
able to practise skills or content from secondary school subjects. In the absence of any documented test results we hesitate to make any general claim in this area. In view of the success of the program in recruiting large numbers of students it appears desirable that a study should be made in which secondary school students are involved as volunteers for periods great enough in length and of sufficient frequency to have a chance of producing significant growth gains, and of conducting a study using pre-test and post-test scores on specific academic objectives to determine whether or not volunteering actually does enhance student growth under conditions similar to those in the current study. In view of the stated opinions of students and teachers it seems reasonable to suppose that the research on this question from the United States can be replicated with similar results in this province.

One final piece of evidence of the perceptions of secondary school teachers was their continuing interest and commitment in the program and their inclination to increase the number of students participating. This tendency on the part of the teachers probably implies that they saw adequate benefits to the student to justify the additional administrative work involved in expanding and maintaining the program.

(d) Evaluations by Elementary School Teachers. For the other side of the effectiveness of the volunteer program, namely its benefit to the elementary school we relied on the observations, statements and evaluations of the elementary teachers involved as well as the evidence presented in section E below on the effect of volunteer help on the performance of these teachers. In determining the impact of the volunteers it would have been ideal to have measured their effectiveness on the academic growth of the elementary school
pupils. However, under the circumstances this would have been almost impossible to arrange, because of the varied periods and frequency of volunteer help and the very large number of students involved. In order to evaluate this aspect thoroughly one should select one or two classes which can be provided with considerable volunteer help over an extended period, so that pre-test and post-test results can be compared against control classes where student volunteers are not present.

It was assumed that if teachers continued to engage students as volunteers in their classrooms some benefits either to the students themselves or to the teachers would be observed by the teachers. Therefore, it is assumed that teachers' continuing commitment to the program and their own statements about the effectiveness of the student volunteers will be a rough indicator of the effectiveness of the volunteers in terms of the needs of the elementary school. It well may be that such evidence will bear more heavily on evidence of success in meeting teachers' needs than in providing for additional growth on the part of the elementary school pupils.

Information concerning teachers' attitudes towards their student volunteers was obtained from a very large number of elementary teachers through the administering of a teacher anecdotal interview form re volunteers, a copy of which is found in the appendix. On this form the teacher or the interviewer recorded statements of the kinds of tasks performed by the volunteer, evidences of benefit to the students and the teacher, evidence of the effect of volunteer help on the teacher's time allocation and evidence of changes in the student volunteer. In addition, teachers were asked to record major problems and suggestion.
Over 95% of the teachers cited advantages to their pupils and advantages to themselves as evidence of the value and effectiveness of the volunteers. The most commonly stated advantage both to the pupils and to the teachers was the opportunity for the teacher, or the teacher and volunteer, to spend more time with individual students. As other benefits to the pupils, the teachers stated that the presence of the volunteer improved the social relationship in the classroom, gave the students a lift or a variety of teaching techniques, provided additional help for special students, greatly expanded the amount of drill and oral reading provided, and gave opportunities for the development of such objectives as respect for another person. Among other advantages stated by a large proportion of the teachers was that the workload of the classroom was lightened or that the total amount of productive work in the classroom was increased. Many of the teachers stated that they had more teaching time when volunteers were present, that they were able to spend more time at planning and remedial work, and that extra drill was provided. Several teachers stated that as a result of the presence of the student the classroom was more relaxed and less confusing. Several teachers said that there are so many jobs to be done today in a classroom that an extra pair of hands is much appreciated.

A number of the teachers had criticisms of the program, along with some positive suggestions. The most common weakness appeared to be that the students were not in the classroom with sufficient frequency or regularity. This problem complicated the involvement of the teacher and also increased relatively the amount of training that the volunteer would require. From comments on this point it was clear that many of the teachers would be prepared...
to accept a volunteer with much greater frequency than was applied this year. This problem was compounded on those occasions where the student did not arrive when expected.

The negative aspects of the student contribution as stated by teachers were that some of them had serious limitations in their ability to help, some were either irresponsible or unreliable in carrying out their work, and a few tended to want to take over situations rather than await directions from the teacher. However, the number of teachers making such complaints was a small minority.

The generally positive statements by the teachers concerning benefits to the pupils and to themselves, the frequent suggestion that the program be expanded, the teachers' statement that they would be able to use more volunteers or use them more regularly, and the frequency with which teachers felt it worthwhile to make positive suggestions for the program all are taken as evidence of the program having been positive and useful from the teachers' viewpoint.

The one administrative aspect of the plans which received frequent comment from the teachers was the fact that the teacher and volunteer did not seem to have an opportunity to meet with each other before making a final commitment to the program. Many of the teachers felt that there would be value in meeting the students in advance of their assignment to the classroom and also of having a longer initial period for discussing the student's role in the classroom. The author does not believe that it would be difficult to make an administrative arrangement that would enable the teachers and volunteers to meet in group situations before being formally assigned to each other.
(e) Effects of Volunteer Help on Teachers' Time Allocations. The most intensive and thorough aspect of the evaluation of the project was concerned with the effects of the volunteer help on teachers' time allocations. From previous studies (Hedges, 1972) it has been established that the presence of parent volunteers in the classroom has had positive effects on the teachers' allocation of time to the various functions of the classroom. The purpose of the present evaluation was to determine whether assistance of secondary school students as volunteers also tended to enable teachers to spend more time at upper level activities and to devote more adult time to individual students. The design for such observations was relatively simple, and copied the procedures used by Hedges and others in making similar observations on adult volunteers and paraprofessionals.

Thirty classrooms were selected in which the secondary school students were serving as volunteers on a long-term regular basis. In each of these classrooms one or more sets of observations were made, each such observation being thirty, forty, fifty or sixty minutes in length, with all period of time in each set being constant. Each set of observations involved three tables of data. On one visit the teachers' time allocations were recorded in a period when the teacher was working alone, i.e., without a volunteer. The second observation repeated the process during a parallel time period when a volunteer was helping the teacher. The third observation recorded the activities of the volunteer during the same time period as the second observation of the teacher.

The observation instrument employed in the study was the Hedges' Taxonomy of Classroom Functions, a copy of which with its accompanying manual are found
In the appendix of this report. This taxonomy has been widely used for this purpose.

The data were collected by two of the assistants in the Halton project and by officers of the Niagara Centre, including the author. Training periods were provided for all data collectors and sample tests of reliability indicated that inter-observer reliability was in the range of 90%.

One possible weakness of the present study was the failure to establish teacher stability prior to conducting the observation. Some of the variation in teachers' time allocations from one period to the other may be regarded as accidental changes. However, it can be anticipated that such changes would probably occur in both directions and therefore would be averaged out. Also, it was established in earlier studies that teacher stability with respect to time allocations for parallel time periods is extremely high. Therefore this weakness does not pose a serious threat to the reliability of the study.

By referring to Tables 1 to 12 the reader will readily discover how the data were recorded. Using an expanded observation sheet with the taxonomy and columns shown on Table 1, the observer was able to time the various tasks that teachers performed, allocate them to the various functions shown on the sheet, and also ascertain whether the task was performed with the class, a group or an individual, and whether such grouping was on a regular or special basis. The time allocations for each teacher were totaled at the end of the observation periods. Tables 1 to 12 show the accumulated time for each type of session for all thirty teachers, and include for some teachers two sets of such observations.
| TABLE 1 Time Distribution Data for Twenty-five Teachers in Sessions without Volunteer Students, Recorded in Minutes |
|---|---|---|---|---|---|---|---|
| | CLASS REGULAR | CLASS SPECIAL | GROUP REGULAR | GROUP SPECIAL | INDIVIDUAL REGULAR | INDIVIDUAL SPECIAL | TOTAL |
| 1) Planning | | | | | | | |
| a) Broad Planning | 86 | 18 | 104 | | | | |
| b) Specific Planning | 36 | 4 | 48 | | | | |
| 2) Motivation | | | | | | | |
| a) Broad Motivation | | | | | | | 2 |
| b) Specific Motivation | | | | | | | |
| 3) Instruction Sequence | | | | | | | |
| a) Initiating a new concept attitude or skill | 26 | 22 | 22 | 70 | | | |
| b) Consolidating a new concept, attitude or skill | 20 | 24 | 16 | 60 | | | |
| c) Adding content to structure | 18 | 106 | 4 | 128 | | | |
| d) Consolidating content | 274 | 56 | 244 | 258 | | | 832 |
| 4) Supervision | | | | | | | |
| a) Active Supervision | 698 | 18 | 24 | 740 | | | |
| b) Passive Supervision | 26 | | | | | | |
| 5) Technical | | | | | | | |
| a) Skilled Technical | 10 | 10 | 20 | | | | |
| b) Non-Skilled Technical | 36 | 10 | 46 | | | | |
| 6) Non-Technical | | | | | | | |
| | 24 | 2 | 4 | 30 | | | |
| 7) Evaluation and Remediation | | | | | | | |
| a) Designing of Instruments | | | | | | | |
| b) Administration of tests | 36 | 54 | 90 | | | | |
| c) Objective Marking | 14 | | 86 | 100 | | | |
| d) Subjective Marking | 20 | 10 | | | | | 30 |
| e) Interpretation of scores | | | | | | | |
| f) Diagnosis & Prescription | 34 | 2 | | | | | 36 |
| g) Remedial Teaching | | | | | | | 66 |
| 8) Guidance and Support | | | | | | | |
| | 10 | 24 | 4 | 38 | | | |
| 9) Heitius, Interruption and Non-coded | | | | | | | |
| | 74 | | | | | | |
| TOTAL | 1,442 | 74 | 530 | 486 | 8 | 2,540 | |
### TABLE 2: Time Distribution Data for Twenty-five Teachers in Sessions with Volunteer Students, Recorded in Minutes

<table>
<thead>
<tr>
<th>Activity</th>
<th>Class Regular</th>
<th>Class Special</th>
<th>Group Regular</th>
<th>Group Special</th>
<th>Individual Regular</th>
<th>Individual Special</th>
<th>Total</th>
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</thead>
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<tr>
<td>1) Planning</td>
<td>a) Broad Planning</td>
<td>76</td>
<td>36</td>
<td>24</td>
<td>136</td>
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<td></td>
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<tr>
<td></td>
<td>b) Specific Planning</td>
<td>162</td>
<td>52</td>
<td>22</td>
<td>236</td>
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<td></td>
</tr>
<tr>
<td>2) Motivation</td>
<td>a) Broad Motivation</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Specific Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Instruction Sequence</td>
<td>a) Initiating a new concept, attitude or skill</td>
<td>82</td>
<td>116</td>
<td>18</td>
<td>216</td>
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</tr>
<tr>
<td></td>
<td>b) Consolidating a new concept, attitude or skill</td>
<td>10</td>
<td>58</td>
<td>30</td>
<td>98</td>
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</tr>
<tr>
<td></td>
<td>c) Adding content to structure</td>
<td>76</td>
<td>6</td>
<td>36</td>
<td>118</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>d) Consolidating content</td>
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<td>194</td>
<td>350</td>
<td>844</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Supervision</td>
<td>a) Active Supervision</td>
<td>306</td>
<td>176</td>
<td>14</td>
<td>496</td>
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<td></td>
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<tr>
<td></td>
<td>b) Passive Supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Technical</td>
<td>a) Skilled Technical</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>b) Non-Skilled Technical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Non-Technical</td>
<td></td>
<td>38</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>44</td>
</tr>
<tr>
<td>7) Evaluation and Remediation</td>
<td>a) Designing of Instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Administration of tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Objective Marking</td>
<td>4</td>
<td></td>
<td>40</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d) Subjective Marking</td>
<td></td>
<td></td>
<td>22</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e) Interpretation of scores</td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>f) Diagnosis &amp; Prescription</td>
<td></td>
<td></td>
<td>14</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>g) Remedial Teaching</td>
<td></td>
<td></td>
<td>74</td>
<td>74</td>
<td></td>
<td></td>
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<tr>
<td>8) Guidance and Support</td>
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<td>2</td>
<td>14</td>
<td>18</td>
<td>34</td>
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<tr>
<td>9) Haltus, Interruption and Non-coded</td>
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<td>662</td>
<td>664</td>
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TABLE 3  Time Distribution Data for Twenty-five Teachers in Sessions Without Volunteer Students, Recorded in Percentages of Total Time.

<table>
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<tr>
<th>Category</th>
<th>CLASS REGULAR</th>
<th>CLASS SPECIAL</th>
<th>GROUP REGULAR</th>
<th>GROUP SPECIAL</th>
<th>INDIVIDUAL REGULAR</th>
<th>INDIVIDUAL SPECIAL</th>
<th>TOTAL</th>
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</thead>
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<td>1) Planning</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>1.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.0</td>
</tr>
<tr>
<td>b) Specific Planning</td>
<td>1.4</td>
<td>.2</td>
<td>.3</td>
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<td></td>
<td></td>
<td>1.9</td>
</tr>
<tr>
<td>2) Motivation</td>
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<tr>
<td>a) Broad Motivation</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>b) Specific Motivation</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>.1</td>
</tr>
<tr>
<td>3) Instruction - Sequence</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Initiating a new concept, attitude or skill</td>
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<td>.9</td>
<td></td>
<td></td>
<td></td>
<td>2.8</td>
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<tr>
<td>b) Consolidating a new concept, attitude or skill</td>
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<td>.7</td>
<td>.9</td>
<td>.6</td>
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<td>2.2</td>
</tr>
<tr>
<td>c) Adding content to structure</td>
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<td>d) Consolidating content</td>
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<td>10.0</td>
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<tr>
<td>4) Supervision</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>a) Active Supervision</td>
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<td>.7</td>
<td>.9</td>
<td></td>
<td></td>
<td></td>
<td>27.0</td>
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<tr>
<td>b) Passive Supervision</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
</tr>
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<td>5) Technical</td>
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<td></td>
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</tr>
<tr>
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<td>3.3</td>
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<tr>
<td>b) Non-Skilled Technical</td>
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<td>2.9</td>
<td></td>
<td></td>
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<td>4.3</td>
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<td></td>
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</tr>
<tr>
<td>b) Administration of tests</td>
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<td></td>
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<td>3.5</td>
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<tr>
<td>c) Objective Marking</td>
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<td></td>
<td>3.3</td>
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<tr>
<td>d) Subjective Marking</td>
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<td>1.2</td>
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<tr>
<td>f) Diagnosis &amp; Prescription</td>
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<td>.1</td>
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<td></td>
<td>1.4</td>
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<td>g) Remedial Teaching</td>
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<td>.2</td>
<td>2.4</td>
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<td>2.6</td>
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<td>8) Guidance and Support</td>
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<td>.9</td>
<td>2.2</td>
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<td>1.5</td>
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<tr>
<td>9) Haltus, interruption and Non-coded</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>2.2</td>
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<tr>
<td>TOTAL</td>
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<td>2.9</td>
<td>26.2</td>
<td>16.3</td>
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<td>CLASS</td>
<td>GROUP</td>
<td>GROUP</td>
<td>INDIVIDUAL</td>
<td>INDIVIDUAL</td>
<td>TOTAL</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
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<td></td>
<td>2.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-technical</td>
<td>1.4</td>
<td>.2</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL LEVEL 3</strong></td>
<td>4.4</td>
<td>.2</td>
<td>2.3</td>
<td>6.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>45.6</td>
<td>1.2</td>
<td>24.8</td>
<td>25.0</td>
<td>96.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table II: Time Distribution Data, by Levels, for Twenty-five Students Working as Volunteers in the Classrooms Pertaining to Tables 1 - 4, Recorded in Minutes.

<table>
<thead>
<tr>
<th>Activity</th>
<th>CLASS REGULAR</th>
<th>CLASS SPECIAL</th>
<th>GROUP REGULAR</th>
<th>GROUP SPECIAL</th>
<th>INDIVIDUAL REGULAR</th>
<th>INDIVIDUAL SPECIAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad Planning</td>
<td>8</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Planning</td>
<td>20</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Specific Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initiating a concept, attitude or skill</td>
<td>8</td>
<td>2</td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consolidating a new concept, attitude or skill</td>
<td>44</td>
<td>2</td>
<td>42</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance and Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td><strong>TOTAL LEVEL 1</strong></td>
<td>28</td>
<td>68</td>
<td>4</td>
<td>58</td>
<td>4</td>
<td>162</td>
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<tr>
<td>Administering content to structure</td>
<td></td>
<td>48</td>
<td>4</td>
<td>38</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnosis and description</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Supervision</td>
<td>282</td>
<td>238</td>
<td>10</td>
<td>10</td>
<td>530</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designing of Instruments</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consolidating content</td>
<td>76</td>
<td>488</td>
<td>36</td>
<td>444</td>
<td>72</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>Remedial Teaching</td>
<td></td>
<td></td>
<td></td>
<td>110</td>
<td>10</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Interpretation of scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL LEVEL 2</strong></td>
<td>358</td>
<td>784</td>
<td>40</td>
<td>604</td>
<td>82</td>
<td>1,868</td>
<td></td>
</tr>
<tr>
<td>Subjective Marking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled Technical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration of Tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td>Passive Supervision</td>
<td></td>
<td>36</td>
<td></td>
<td></td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective Marking</td>
<td>44</td>
<td>36</td>
<td></td>
<td></td>
<td>80</td>
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</tr>
<tr>
<td>Non-skilled Technical</td>
<td>130</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>142</td>
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<tr>
<td>Non-technical</td>
<td>52</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL LEVEL 3</strong></td>
<td>226</td>
<td>90</td>
<td>76</td>
<td>2</td>
<td>394</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>612</td>
<td>942</td>
<td>44</td>
<td>738</td>
<td>88</td>
<td>2,424</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 12  Time Distribution Data, by Levels, for Twenty-five Students Working as Volunteers in the Classrooms Pertaining to Tables I - 4, Recorded as Percentages of Total Time.

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>CLASS REGULAR</th>
<th>CLASS SPECIAL</th>
<th>GROUP REGULAR</th>
<th>GROUP SPECIAL</th>
<th>INDIVIDUAL REGULAR</th>
<th>INDIVIDUAL SPECIAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad Planning</td>
<td>.3</td>
<td>.4</td>
<td>.1</td>
<td>1.4</td>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Planning</td>
<td>.8</td>
<td>.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initiating a concept, attitude or skill</td>
<td></td>
<td></td>
<td>.3</td>
<td>.1</td>
<td></td>
<td></td>
<td>.4</td>
</tr>
<tr>
<td>Consolidating a new concept, attitude or skill</td>
<td></td>
<td></td>
<td>1.6</td>
<td>.1</td>
<td>1.6</td>
<td></td>
<td>3.3</td>
</tr>
<tr>
<td>Guidance and Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.6</td>
<td></td>
<td>.6</td>
</tr>
<tr>
<td>TOTAL LEVEL 1</td>
<td>1.1</td>
<td>2.6</td>
<td>.2</td>
<td>2.3</td>
<td>1.4</td>
<td></td>
<td>7.6</td>
</tr>
<tr>
<td>Adding content to structure</td>
<td></td>
<td></td>
<td>1.7</td>
<td>.2</td>
<td>1.4</td>
<td></td>
<td>3.3</td>
</tr>
<tr>
<td>Diagnosis and Prescription</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.1</td>
<td></td>
<td>.1</td>
</tr>
<tr>
<td>Active Supervision</td>
<td>11.1</td>
<td>9.3</td>
<td>.3</td>
<td></td>
<td></td>
<td></td>
<td>20.7</td>
</tr>
<tr>
<td>Designing of Instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.4</td>
<td></td>
<td>.4</td>
</tr>
<tr>
<td>Consolidating content</td>
<td>2.8</td>
<td>19.1</td>
<td>1.4</td>
<td>17.3</td>
<td>2.8</td>
<td>43.4</td>
<td></td>
</tr>
<tr>
<td>Remedial Teaching</td>
<td></td>
<td></td>
<td></td>
<td>4.3</td>
<td>.3</td>
<td></td>
<td>4.6</td>
</tr>
<tr>
<td>Interpretation of scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL LEVEL 2</td>
<td>13.9</td>
<td>30.5</td>
<td>1.6</td>
<td>23.4</td>
<td>3.1</td>
<td></td>
<td>72.5</td>
</tr>
<tr>
<td>Subjective Marking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled Technical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Administration of Tests</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passive Supervision</td>
<td></td>
<td></td>
<td>1.4</td>
<td></td>
<td></td>
<td></td>
<td>1.4</td>
</tr>
<tr>
<td>Objective Marking</td>
<td>1.7</td>
<td>1.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.1</td>
</tr>
<tr>
<td>Non-skilled Technical</td>
<td>5.1</td>
<td>.4</td>
<td>.1</td>
<td></td>
<td></td>
<td></td>
<td>5.6</td>
</tr>
<tr>
<td>Non-technical</td>
<td>2.0</td>
<td>.3</td>
<td>.3</td>
<td>.1</td>
<td></td>
<td></td>
<td>2.7</td>
</tr>
<tr>
<td>TOTAL LEVEL 3</td>
<td>8.8</td>
<td>3.5</td>
<td>3.0</td>
<td>1.1</td>
<td></td>
<td></td>
<td>15.4</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>23.8</td>
<td>36.6</td>
<td>1.8</td>
<td>28.7</td>
<td>4.6</td>
<td></td>
<td>95.5</td>
</tr>
</tbody>
</table>
Tables 1 to 12 present the same data in four different forms, first as raw data by minutes and then by percentages of total time (Tables 1 to 6) and then by levels, again by minutes and by percentages (Tables 7 to 12). Tables 1 and 2 show time distribution for the teachers in minutes, first in sessions without volunteers and then in sessions with volunteers. Tables 3 and 4 present the same information in percentage form. Tables 5 and 6 show in minutes and percentages the functions performed by the volunteers. Tables 7 to 12 repeat these data, employing a levels system for analyzing the significance or importance of the time allocations.

The basis for the levels system employed in Tables 7 to 12 is a hierarchy of the functions in the classroom previously established by panels of referees representing classroom teachers, school administrators and teacher educators. An extremely high level of consensus was reached in establishing the hierarchy, and it is therefore contended that while it does not represent an absolute hierarchy, it serves as a useful standard for comparison. In Tables 7 to 12 it will be noted that there are three levels of functions with provision for a total to be shown for each level. Even a casual examination of the functions listed in the three levels will establish in the reader's mind the purpose of allocating the various functions to these levels. Incidentally, the reader may note a discrepancy in the totals between Tables 1 to 6 and Tables 7 to 12. The reason for this is that times allocated to the final category in Tables 1 to 6, entitled Hiatus, Interruption and Non-coded simply could not be categorized in the hierarchy of functions of the classroom because this category is not a function but was included in the original observation instrument merely to account for times that could not be
allocated to the twenty-one actual functions. Therefore, in establishing
the levels this category and the data included in it were dropped from the
tables.

A comparison of either Tables 1 and 2 (data in minutes) or Tables 3 and
4 (data in percentages) will enable the reader to detect the more important
changes in time allocations. For example, the major increases are as follows:
specific planning 1.9 to 9.2 per cent; initiating new learning 2.8 to 8.4 per
cent; consolidating new concepts 2.2 to 3.7 per cent; and consolidating con-
tent 30.9 to 34.7 per cent. Since these are all vital professional functions
it can be argued that these are important reallocations of time.

At the same time one can detect some important reductions in time al-
locations, as for example in active supervision from 27.0 to 19.4 per cent;
non-skilled technical 4.3 to 2.8 per cent; administration of tests from 3.5
to 0 per cent; and objective marking from 3.9 to 1.7 per cent. All four of
these categories are considered to be non-professional.

The same tables show some interesting changes with respect to the group-
ings to which teachers devoted their time. For example, the amount of time
that the teacher spent with the entire class was reduced from 51.7 to 50.2
per cent and with groups from 26.2 to 24.8 per cent. These reductions in
time spent with classes and groups are accounted for in the additional time spent
with individuals, which rose from 16.7 to 25.0 per cent.

Tables 5 and 6 show the minutes and percentages of the volunteers' time
that was devoted to each of the functions. It will be noted that the largest
allocations of student time were in consolidating content (43.4%) and active
supervision (20.7%). No other function took up more than 6% of the students'
time, and a general inspection of Table 6 reveals that the volunteers' time was actually allocated to more functions, and more evenly distributed among the functions than was teacher time. It is not surprising to find that the largest consumer of student time, actually approaching half of the total, was in consolidating content. This category includes drill and review and also includes listening to children read; this task is also the largest single consumer of teacher time in many classrooms. Incidentally, it will be noted on Tables 1 to 4 that the two functions of consolidating content and active supervision were also the largest consumers of teacher time. Thus it appears that in allocating tasks to volunteers teachers tend to allocate them to those tasks which consume the greatest amounts of teacher time. When one adds together the percentages of time of the two adults in the classroom one sees even more important increases over the information in Tables 1 and 3.

It is interesting to analyze the distribution of the volunteers' time with respect to the grouping patterns. It is noted that the volunteers spent 28.1 per cent of their time with the class, 38.6 per cent with groups and 33.3 per cent with individuals. A comparison of the figures in Table 1 with the totals in Tables 2 and 5 shows that when the teachers were working alone they spent 594 minutes with individuals, while on occasions when the same teachers had volunteers a total of 1490 minutes of adult time was spent with individuals, this time being composed of 664 minutes of teachers', and 826 minutes of volunteers' time. In other words, when volunteers were present the amount of adult time spent with individuals was approximately tripled, a finding that is roughly comparable to that in the study of the influence of volunteer parents on teachers' time allocations.
In order to determine the importance of the teachers' time allocations the reader should refer to Tables 7 to 12 and in particular to Tables 9 and 10 which show by levels the changes in the teachers' time allocations. Tables 9 and 10 show that when the teacher had a volunteer assistant 26.6 per cent of teacher time was given to level I functions, whereas only 12.5 per cent was spent in level I in the regular sessions. In other words, in the presence of the volunteer the teacher devoted more than twice as much time to level I functions. The total time allocations to level 2 functions was altered only very slightly, dropping from 66.9 per cent to 63.1 per cent when volunteers were present. The largest reduction in time allocation was in level 3 where the percentage of time was reduced from 18.4 per cent to 6.9 per cent.

If one combines the percentages shown in Tables 10 (percentages of teacher time by level when volunteers are present) and Table 12 (percentages of volunteers' time), and then compares this total to the figures for Table 9 (percentages of time when volunteers were not present), one notices some even more dramatic changes with respect to the allocation of adult time in the classroom. This comparison shows that the level I functions were increased in time from 12.5 per cent to 34.2 per cent of one person's time. In view of the general consensus that these functions represent the most vital functions of the classroom it can be argued that the efficiency of these classrooms was greatly enhanced in the presence of volunteers. Of course this study does not deal with the question of whether the time spent in various functions was of equal competency. It would be difficult to resolve this question without a carefully designed evaluation which measured comparative
student growth in the parallel situations.

In summary these statistics compiled from observations in thirty class-
rooms in which volunteers were serving on a continuing basis indicate that
during the times when volunteers are present the teacher was spending con-
siderably more time on upper level functions than in normal situations, and
was also arranging the allocation of time in such a way that individual stu-
dents derived almost three times as much individual help. The general con-
clusion that can be reached from these observations is that the work allo-
cations in the classroom were improved, at least in terms of impact on in-
dividual attention and on instructional practices.

A SPECIAL ADAPTATION OF THE MODEL

During the 1972-73 school year an opportunity arose for testing out a
special adaptation of the model described above. This adaptation enabled us
to have a look at a secondary school student volunteer program in which only
one subject of the secondary school curriculum had a direct relationship to
the project. While assisting the staff at Immaculate Conception School
(a bilingual elementary school in St. Catharines) to develop a volunteer
program the problem arose of finding sufficient volunteers who were reason-
ably proficient in Oral French. About the same time we were made aware of
the concern of many secondary school teachers with respect to practical
opportunities for secondary school students to use their Oral French in
everyday situations. This observation by the teachers was very similar to
that expressed by federal authorities, namely that a major problem of bi-
lingualism is that the learner has inadequate opportunities to apply the
second language in meaningful contexts outside of the instructional setting.

With these two needs from the two schools in mind, it appeared to be a golden opportunity to explore the relationship of a secondary school volunteer program in one subject area to related needs in an elementary school. We found that both the elementary teachers in the bilingual program and the teachers of Oral French in Denis Morris High School were enthusiastic about a program providing for about fifty secondary school Oral French students to serve for about one hour per week in the bilingual elementary program with particular emphasis on the primary grades and on opportunities for the student to employ Oral French.

Ideal cooperation in this adaptation was received from both the elementary and the secondary school. A feeling of innovation prevailed, suggesting that some of the success of the program may have in fact been the result of a halo effect. The secondary school students quickly learned to perform specific learning tasks at the primary level, and a series of observations and discussions indicated that they were employing their Oral French skills over 80 per cent of the time in which they were in the elementary classrooms.

Evaluations of this adaptation were conducted mainly in discussions with the students themselves and with teachers at both the elementary and the secondary schools. No formal evaluation of the attitudes of any of the groups was required; because obvious enthusiasm for the program was reflected on every visit. In fact all three groups concerned frequently requested that we increase the number of students involved. The elementary teachers wish to continue with the program next year, and so many students of the
secondary school wished to participate that a major expansion of the pro-
gram will have to be planned if their wishes are to be accommodated. The
students themselves stated that their Oral French performance was greatly
improved, but they also commented on many other values that they also saw
in the program, most of which are similar to those indicated by the students
in Halton County and reported on in the previous sections. The secondary
school teachers were not asked to provide information on differential growth
patterns in Oral French for the participants, but in every discussion on the
subject the teachers commented on the very favourable Oral French growth of
the students concerned in the program. It seems probable that most of the
students selected during the initial year of the adaptation were students
who were already reasonably successful in their Oral French studies, so it
would have been invalid to have attempted to compare their growth with that
of average or typical students.

This adaptation of the secondary school model appeared from every point
of view to be advantageous to all parties concerned -- to the secondary
school students who were given expanded opportunities to use their Oral
French in meaningful and secure contexts; to the elementary school teacher
who was able to assign numerous learning tasks to the volunteer students;
and to the elementary school students who received considerably more in-
dividual attention and assistance with their Oral French. One surprising
outcome of the study was that we received no complaints in the elementary
school about the quality of the Oral French provided by the secondary school
students. If there was any deficiency in the Oral French skills of the
secondary school student they were more than compensated for, at least in
the eyes of the elementary teacher, by the additional help that they pro-
vided. By working with very young children in the elementary school the
secondary school student apparently felt adequately secure to proceed in
the second language without undue concern about weaknesses in vocabulary,
pronunciation, etc. The fact that most of the communication with young
children was in arithmetic instruction and Oral French reading perhaps
accounts for the lack of problems in vocabulary. In any case the program
was considered beneficial by all concerned.

It can be argued that this Oral French adaptation of the secondary
school model is a natural one which might not be as readily applied to other
subject areas. There is no doubt much truth in this argument. However, the
adaptation is one which many other secondary schools might capitalize on
because the problem in Oral French usage appears to be a general one in the
culture. The need in other subject areas may not be as profound and there-
fore might not require so intensive a working relationship between the two
levels. It seems probably that if the level of commitment were adequately
sufficient many other departments of the secondary school could find oppor-
tunities for application of particular lessons or units in elementary school
programs, even if they did not reach the dimensions documented in this
special adaptation.
Chapter 2
The Role of Adult Volunteers in a Differentiated Staffing Plan

As stated in the introduction, this program, entitled Program E, was designed to study the role of volunteer activities in a school in which a modified differentiated staffing plan was in effect. The major outcome of this study is the description of the respective roles or functions performed by the various levels of staffing including volunteers.

This study was conducted at St. Thomas More Comprehensive School, a secondary school operating in Hamilton under the Wentworth County Roman Catholic Separate School Board. This school was built and opened during the past two years, and from its beginning has employed a modified differentiated staffing plan and has also incorporated a number of major innovations in a building which is designed to provide for a maximum of team teaching in an open space design.

On page 57 a diagram is presented to show the levels of staffing at St. Thomas More along with the lines of authority and relationships existing among the five levels. It will be noted that the principal, three deans, and a student services counsellor comprise the executive council of the school. The teaching staff, numbering thirty-one, are responsible to the executive council. In staffing the school a number of teachers' salaries were deliberately traded off for a sum of money which would enable the school to engage paraprofessionals. During the past year there were three permanent paraprofessionals and approximately thirty other people who were employed as paraprofessionals on a part-time basis. As shown in the diagram the
ST. THOMAS MORE COMPREHENSIVE SCHOOL
DIFFERENTIATED STAFFING DESIGN

EXECUTIVE COUNCIL

PRINCIPAL

DEAN OF SERVICES
DEAN OF INSTRUCTION
DEAN OF PROGRAM
STUDENT SERVICES COUNSELLOR

TEACHERS (31)

PARAPROFESSIONALS (3 + 30)

VOLUNTEERS (50)
paraprofessionals are responsible to the Dean of Services and to the teaching staff.

The fifth level of staffing involves volunteers. During the past year approximately fifty people served as volunteers in the school on a basis sufficiently extensive or regular to be counted in the volunteer corps. In addition, a large number of persons served on an individual or temporary basis. As shown in the diagram the volunteers, like the paraprofessionals, are responsible jointly to the Dean of Services and the teaching staff. In practice the Dean of Services has assumed the responsibility of the organization of the programs for paraprofessionals and volunteers and has given leadership in the recruitment and assignment of the volunteers and paraprofessionals. Aside from the ongoing aspects of administration of these two groups of additional personnel carried on by the Dean of Services, the teaching staff assumes the major responsibility for the allocation of functions performed by the paraprofessionals and volunteers.

During the past year an additional element was employed at the level of the volunteer corps. As a result of the author's involvement at Mohawk College in the study and training of a group of students who wished to become community services leaders, it became possible to assign some of these students to schools or school systems to assist in the development of volunteer and other community programs. One of the persons so assigned was Mr. Maurice Willock, who served his practical work as an organizer of the volunteer corps at St. Thomas More. Mr. Willock worked under the direction of the author and the Dean of Services in the school and performed functions such as recruiting volunteers, the identifying of students with special
needs, the organizing of tasks identified or prescribed by the teaching staff, the assigning of related functions or tasks to volunteers, and the overall supervision of a number of volunteers whose activities were mainly in remedial instruction. While Mr. Willock made an important contribution to this aspect of the volunteer program, one should not assume that the presence of an outside coordinator is essential to the program. Had he not been present, the Dean of Services would have included his functions in his own list of responsibilities within the school. In that respect then the additional help was merely an extension of some functions of the Dean of Services. Because the workload of the Dean of Services was particularly heavy during the year under study, the services of the additional officer on a part-time basis was particularly helpful, but should not be regarded as an essential ingredient of such a plan.

A brief description of the physical organization of the school may be useful to the reader. There are approximately 800 students at St. Thomas More. The main learning areas are a very large open space surrounding a learning resource centre, and a smaller open space on another floor. The larger open space is used mainly for instruction in mathematics, English, French, history, and geography. The smaller open space is designed as a very large science laboratory. Other subjects such as industrial arts, home economics, physical education, music, etc. are conducted in separate smaller units designed in keeping with the needs of the subject concerned.

It is important to note that a very large amount of the instruction is conducted in various forms of team teaching units. In general, a part of the open space area is designated to a particular subject, and the teachers
assigned to that subject work as a team in that area. While team leadership is evident within each subject area, the functions of leadership tend to be shared by members of the particular team. Individual staff members may work at different times with very large groups, class groups, small groups, and individuals. In some subjects, particularly mathematics, the students progress at more or less their own rate, and as a result a great deal of the instruction takes the form of individual assistance when problems arise. On the other hand, some subject areas are conducted mainly on a class basis with the entire class receiving more or less the same instruction at the same time. In classes in French instruction, for example, it is common practice for the entire class to take the same instruction. A visit to the large open area would establish that a wide variety of teaching practices and group arrangements are in evidence at any point in time.

The two main observers in the current project, the author and Dr. Robert Kenzie, were from time to time asked to observe or comment on general aspects of the learning environment in the school, in addition to the documentation of the functions described later in this chapter, even though the general observations would not ordinarily be considered a part of the observer's functions. No doubt the request for such observations were in recognition of the objective nature of such observations, and were motivated by the fact that the program in the school was new. The most apparent aspect of the learning environment in the school is related to the very high degree of attention to the individual needs and progress of the students. A contrast between the most individualized aspects of the open area and the most class-orientated activities has been provided in the previous paragraphs. In the
special subject areas similar patterns, with a high degree of flexibility, can be observed. Perhaps the most interesting application of individual attention is provided in the home economics area, where the students appeared to be constantly engaged in practical tasks, with the teacher spending almost all her time on individual teaching. In fact in this environment no group teaching was observed. The high level of involvement of the students both here and in other areas in practical tasks is one of the highlights of the program. Accompanying the individual tasks there appears at times to be some apparently irrelevant student behavior. However the two observers on reflecting on such behavior concluded that the amount of apparently wasted time is no greater than and perhaps not as great as with more traditional teaching procedures, particularly when one recognizes that it is not possible to tell whether all students are in fact fully engrossed in the lesson in large-group teaching situations. Another noteworthy feature of the organization of the school was the use of periods in the day which appeared to be totally free of instruction, and in which students could move about, plan work with other students or teachers, or engage in recreational activities. Considerable use is made of the public address system in the school to maintain communication concerning policies, attendance, changes in program, etc. There is a great deal of freedom of movement within the school, and a visitor is likely to encounter small groups of students in hallways and empty rooms at almost any time of the day. The students seem to be both happy and involved in the program of the school, and from casual observations and comments one concludes that the students are proud of their school.
RECRUITMENT AND ASSIGNMENT OF VOLUNTEERS

Because the author's interest was mainly in the question of the function of volunteers as a component of the total array of functions of the school, his major focus was on the volunteers themselves. Therefore it became a natural activity of the author in the school to assist the school with the development and extension of its volunteer program. The school had already developed a program in which a number of volunteers were working on a continuous and fairly high level basis within the school. In addition to this well established corps of volunteers, the author, accompanied by Mr. Willock, assisted in the recruitment and assigning of an additional corps of volunteers.

Some distinction between the tasks performed by these two groups of volunteers was evident. The corps recruited by the school attended on a more regular basis and with an apparently higher level of commitment, and tended to be assigned on a more regular basis to individual staff members, with whom they worked, often in cooperation with the instructional activities of the teacher or the learning area in question. A typical example would be the services in the French program provided by volunteers who were highly efficient in Oral French and were thus able to reinforce the instruction provided by the teacher. The second corps of volunteers, with which the author and Mr. Willock were engaged, were recruited mainly to help out with a wide range of remedial problems in the school. In general this corps of volunteers served for a shorter total period of time, and in all represented a smaller total volunteer contribution than did the original corps.

While the original corps of volunteers presented relatively few problems
with respect to regularity of attendance, level of commitment, competency, etc., much less success was achieved with the second corps recruited to assist with remedial instruction. We had considerable difficulty in recruiting an adequate number of volunteers to serve in this activity, and it required much work on the part of those in charge to maintain this corps.

A number of reasons may account for the difficulty in establishing and maintaining a corps of volunteers to help with the remedial program in a secondary school. It may be that in this school the most highly committed volunteers had already been recruited into the regular program. A more probable explanation of the difficulty was in the volunteer's perception of the work to be done. Even though we assured them that the tasks we would be giving them would be relatively easy for them to carry out, the fact that secondary school mathematics was a major area for such remedial work no doubt frightened away many of the adults whom we contacted. A more fruitful approach to the recruitment of volunteers to assist with remedial programs in secondary schools might be to recruit volunteers for more general activities and then to gradually introduce them to specific low-level remedial tasks.

In planning for the services of the volunteers, those in charge invited teachers to identify pupils with learning difficulties, particularly in the mathematics area. We then worked with the teachers to determine methods of identifying the specific difficulties that students were having. We started with the simple analysis of problems in multiplication, addition, division, subtraction, etc. Using flash cards it was relatively easy for volunteers to help students identify such low-level difficulties and to
prescribe practices which would alleviate these problems. These included drill sessions both at home and with the volunteers. Next, the staff identified particular facets of the mathematics program on which students could be tested, given remedial instruction, and provided with drill. These involved mainly operations ordinarily taught in elementary school and considered essential to efficient mathematical operation in the secondary school. The remedial program in mathematics was limited to this range of remedial practices, mainly as a result of our failure to recruit as large a volunteer corps as would have been essential to have resolved adequately these remedial needs and then to extend such practices to higher levels and to other subject areas.

INTERACTION AMONG TEACHERS, PARAPROFESSIONALS AND VOLUNTEERS

The most notable feature of the interaction among the three levels of instructional staff was the relatively small amount of time of that such interaction seemed to require. Many of the paraprofessionals were university students who had considerable competency in the subject area in which they were working. Similarly, the volunteers obviously had a firm grasp of what they were expected to do from day to day. As a result both groups received minimal guidance from the teacher in charge. In tabulating the activities of these groups the amount of time spent in interaction was included under the headings for planning on the observation sheets. In most cases it involved figures under 10 per cent of the time, and was only one component in the total amount of time allocated to planning, with the more significant amount of such time being specific planning with pupils.
The quality of interaction among the three groups could be described as being friendly, efficient and democratic. There was considerable sharing by all parties involved with respect to the ideas presented and accepted. The location for such interaction was not limited to the classroom. In fact, the paraprofessionals and the volunteers appeared to use the staff room as much as did the teachers. In the science area the paraprofessional had a desk in the science office. In general the interaction among the groups was related to explanations of specific procedures to be followed in supervising, instructing or remediating student activities. It was obvious that all three groups were engaged a considerable amount of the time in activities which have been categorized as instruction and supervision.

TEACHER EVALUATION OF PARAPROFESSIONALS AND VOLUNTEERS

A number of teachers were interviewed concerning their impressions of the competency and contributions of the paraprofessionals and volunteers. On the basis of the information derived in these interviews, one can conclude that the teachers in general were satisfied with the contributions of both of these levels of additional assistance. They reported that both groups of helpers made a significant contribution to the school program this year. In the case of both kinds of helpers the staff expressed the view that more such persons could be profitably engaged in the school and that this would be an improvement in the program. They felt that some selection criteria should be established for the allocation of volunteers.

Some of the paraprofessionals and some of the volunteers appeared to be highly qualified for the kinds of tasks that they were assigned. The university students, of course, brought a particularly strong background in
certain subjects into the program. One of the full-time paraprofessionals was highly qualified in chemistry, and plans to go into teaching, and as a result seemed to be extremely useful in the science laboratory both in such technical tasks as maintaining equipment and in the individual teaching of students working on individual lab assignments. Similarly some of the volunteers had particularly strong backgrounds in some of the subject areas in which they were working; particular reference is made to the home economics program and the Oral French program in this respect.

The author had numerous opportunities for gathering informal information about the teachers' evaluations of their additional helpers, and rarely were any comments made of a negative or critical nature. It was obvious that the teachers could identify sufficient individual needs in their teaching areas to keep all of the helpers profitably engaged most of the time.

TIME DISTRIBUTION BY THE FIVE LEVELS OF STAFF

The predominant activity of the project team involved the collecting of data for making a comparative analysis of the time distribution by function for each of the five levels of staffing identified above. For the purpose of collecting data the Hedges' Taxonomy of Classroom Functions was employed. Most of the data could be collected by direct observation; in fact all the data for teachers, paraprofessionals and volunteers were collected by this means. Most of the data for the deans and the principal were derived from an analysis of the work schedules of the persons concerned. This analysis was verified by an interview with the individual concerned. The taxonomy
provides for twenty-one functions. However because it was difficult to
distinguish among various functions in such categories as motivation, plan-
ing and instruction, particularly from interview data, it was decided to
classify the time distribution by broad categories of functions rather than
by individual functions. Thus all the time was categorized under the fol-
lowing broad categories: planning; motivation; instruction; guidance and
support; evaluation; supervision; and technical and non-technical activ-
ities.

The reader is reminded that the taxonomy of classroom functions employed
in the study, and the accompanying manual are found in the appendix of this
report. An examination of the 21 function in the taxonomy will enable the
reader to understand the logic of the seven broad categories in which these
functions have been grouped for the purposes of the present report.

A summary of the findings is presented in Tables 13 and 14, first in
percentage form and then in a bar graph which shows pictorially the compar-
isons in time distribution for the five levels of staffing.

It should be pointed out that there are a number of weaknesses in the
process of collecting the data. However, most of these do not seriously
affect the information provided in the tables. Because of the large number
of people involved it was not possible to observe all of the people in each
level, or in all cases to observe for identical periods of time. However,
no deliberate selection was made within each level, and it is believed that
those not observed were similar in their time allocations to those observed
in the study. As in any statistical procedure which groups together raw
data some information is lost. For example, some individuals spent almost
<table>
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<tr>
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<th>Teachers</th>
<th>Paraprofessional</th>
<th>Volunteers</th>
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<td>0</td>
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<td>5</td>
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<td>1</td>
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<tr>
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<td>10</td>
<td>13</td>
<td>24</td>
<td>27</td>
</tr>
</tbody>
</table>

|                      | 100       | 100   | 100      | 100              | 100        |
TABLE 14  Bar Graph Showing Time Devoted to Various Functions by the Five Levels of Staff.
all their time in one or two functions, but this fact is not apparent in the totals for the respective levels. This loss of information is particularly critical with the volunteers. It was noted that some volunteers devoted almost all of their time to instruction, others to remedial teaching, others to technical tasks; etc. However, in the tables it appears as if the volunteers may each have performed a wide range of functions.

A comparative analysis of the summaries of Tables 13 and 14 provides some interesting distinctions in the time distribution of the various levels of staffing. It is interesting to observe that all five levels spent important amounts of time in planning, with the principal and deans using the greatest relative proportions of their time for this function. It is rather surprising to note that both the paraprofessionals and the volunteers spent more time on specific planning with students than did teachers. This fact in part may be accounted for by the probability that much of the teacher's planning was conducted outside of classroom hours.

A most significant finding was that teachers and paraprofessionals spent 47 per cent and 39 per cent respectively of their time on instruction. These figures for both groups exceed by large amounts the general findings about the time distribution of teachers and of paraprofessionals. For example, Hillsum (1972) reports that teachers spend only 26 per cent of their time on instruction. The author interprets these figures as being products both of the team organization and individualized instruction in the school and of the effect of having paraprofessional and volunteers performing some of the other functions and in particular the technical functions. Probably the evidence of teachers spending almost half their time on in-
struction represents the most important effect of the program and also represents an important contribution of the paraprofessionals and volunteers to the overall program of the school.

It is noted that relatively little responsibility for motivation was given to the paraprofessionals and to the volunteers. This situation probably indicates that the tasks given to these groups of people by teachers were already highly identified by the teachers, and required little deliberate motivation. Alternately, it may indicate a lack of understanding of motivation by the assistants.

Surprisingly enough the paraprofessionals and volunteers performed relatively little of the supervisory work in the school. The author has found that in most elementary programs volunteers are given large amounts of supervisory responsibility. Obviously in the existing program most of the supervision is retained by the teachers. Apparently this situation relates to the age levels of the students concerned.

It can be expected that both the paraprofessionals and the volunteers would be engaged in fairly large amounts of technical and non-technical work in the school. It was found that paraprofessionals spent 17 per cent of their time and volunteers 27 per cent in the broad function described as technical and non-technical. However, one interesting aspect of this distribution was noted, namely that in the non-technical area no volunteer time was recorded, a fact which suggests that the paraprofessionals perform many of the lowest level jobs in the classroom, most of which are related to what might ordinarily be called household chores such as distributing and collecting materials, moving furniture, etc. The avoidance by the teachers of non-technical assignments for volunteers is healthy evidence of
the fact that teachers sense that volunteers must be given tasks which are reasonably challenging if they are to be both motivated and rewarded for such activities. The absence of any evidence of non-technical work by volunteers runs counter to the initial notion stated by many teachers, namely that volunteers should perform mainly the housework functions of the classroom.

Because the second corps of volunteers referred to above spent most of their time in identifying and assessing particular remedial problems of students and then of providing remedial instructions, it is not surprising to note that 41 per cent of the volunteers' time was spent in evaluation and remediation. No doubt this figure is unusually high for a volunteer program, and represents the specific assignment to remedial work to a degree not likely to be seen where such a focus is not provided.

It is noted that considerable guidance and support was given by the principal and the deans including the student services counsellor. On seeing the figures in the table these individuals contended that they thought that the figures were actually low and that in a typical week they would be spending more than the percentages shown in guidance and support activities.

It is noted that the deans performed a number of functions in addition to planning and guidance and support, and according to the data spent over 20 per cent of their time in instruction and supervision.

Probably the most significant observations that can be taken from the summaries are as follows:

1. One effect of the additional levels of staffing was that teachers were able to approximately double the percentage of their time over what
teachers ordinarily give to instruction.

2. The percentage of the teacher's time on instruction, when accompanied by the percentages of instructional time by paraprofessionals and volunteers, indicates that in this school a vastly higher proportion of adult time is given to instruction than in most situations. Obviously this means that far more of the Instructional services of the adults were given to meeting individual needs of students.

3. The reasonably large percentages of time given to technical and non-technical functions by both the paraprofessionals and the volunteers indicate that teachers were relieved of many of the non-professional activities of the school, a fact which accounts in part for the sharp increase in the percentage of time spent on instruction.

4. The activities of four of the groups in evaluation and remediation indicate that this function in the school was performed to a much higher extent than in typical programs. The presence of the volunteer corps in particular markedly increased the amount of remedial instruction.

5. A remarkable amount of time was spent on planning, and included both broad planning and specific planning with students. One suspects that the fact that the program of the school is new accounts in part for the large allocations of time to planning activities.

It would be useful to have comparative data for these teachers if paraprofessionals and volunteers were not present. While such a comparison might not be possible within this school, it should be possible to find a control school using open space and team teaching, with such school serving as a control for such comparison.
A further study which could be conducted within the school under the existing arrangements would be a comparison of the time allocations of the teachers in time periods when paraprofessionals and/or volunteers were present in their area with allocations when neither of these two levels of additional staffing was present. For example, it would be interesting to determine whether teachers are able to sustain the allocation of their time in ways which enable them to spend almost half their time in instructional tasks.

The present study is not able to determine the degree to which the allocation of time by the present staff was a function of the individualized program, team teaching approach and open space areas, or of the additional help provided by the paraprofessionals and volunteers. This question could be answered if a study were made of the time allocations of teachers within the school who make use of these extra helpers as contrasted with teachers who might agree to avoid using such help for the period of the study.

An obvious question concerning the information gathered in this study has to do with whether the data would be replicated in a similar modified plan for differentiation of staff in other schools. Any prediction on this question must be tempered by the fact that the differentiated staffing plan, the team teaching organization, the individualized approach to instruction, and the open space area, probably all contributed to the greater amounts of time devoted to instruction. In order to produce the effects documented in this study it is probable that these components would be required. Nevertheless it seems probable, on inspection of the functions performed by the paraprofessionals and volunteers, that many of these
could be performed within more traditional secondary school organizational plans, and such activities would in turn be expected to produce certain changes in the time allocations of teachers. Earlier studies on the effects of volunteers (Hedges, 1972) and of paraprofessionals (Bay City, Michigan, 1960) show that at the elementary school level additional help has a marked effect on the allocation of teacher's time, with greatly increased time devoted to instruction. In view of the data collected in this study it seems probable that the findings in traditional elementary school programs could be at least in part replicated at the secondary school level.

Because the present project is part of a long-term study of volunteer help, a few additional comments about volunteers at St. Thomas More are in order. At this school in addition to the activities of volunteers documented in this study, numerous general activities more or less unrelated to the classroom or to instruction were also performed by highly committed and competent volunteers. For example, some aspects of the recreational and lunch programs are handled by volunteers. Many office procedures were supported by volunteer help. Finally, one of the largest and most interesting activities of volunteers was observed during June 1973 when a team of interested volunteers assumed almost the entire responsibility for arranging the numerous details of the time-table for the next school year. This highly complex, frustrating, and time-consuming job was done so competently that the principal has reported to the author that the only additional work that was required on his part was a minor adjustment of a number of periods caused by special considerations not generally known at the time the time-table was set up by the volunteers.
It can be concluded that the volunteer program at St. Thomas More is an important part of the school's program, not only as it relates to the instruction and general organization of the school but also in terms of continuing community support. It will be interesting to observe the ways in which the staff is able to extend and apply the information learned this year, and particularly to broaden the corps of volunteers who made it possible to enhance the instructional program of the school.
CHAPTER 3

Using Volunteers in an Individualized Reading Program

The third program in the present project, entitled Program F, is based on a plan for increasing the amount of volunteer help in an individualized reading program in order that the level of readiness of the student may become the basis for new instruction in reading. A deliberate aspect of such a plan is a procedure developed and organized by the teachers concerned for vertical integration of the students across the existing grade structures.

Because this program was intended to be an extension of an existing program, Victoria Public School in St. Catharines (Lincoln County Board of Education) was selected as the school in which to develop it. Victoria School already had a highly developed volunteer program; in fact one of the classrooms at Victoria School was the locale for the radical proposal dealing with the reorganization of teacher time in the report entitled Using Volunteers in Schools.

Initially, the teachers of the kindergarten through grade 3 were to be involved in the program. The vertical reorganization scheme was to be left in the hands of the teachers to develop in order that we could find out whether the additional volunteer manpower could in fact be deployed adequately by the staff to enable them to get the time required for planning the reorganization and for meeting the individual needs of students within the reorganizational plan selected. Thus, the additional help was intended to meet two needs: planning time for teaching staff, and additional help to individual students under the teacher's direction.
For a number of reasons the greatest amount of additional volunteer help was eventually devoted to the kindergarten and grade one classrooms in the school. One reason for this outcome was that the teachers concerned had already experienced volunteer programs to some degree and appeared to be secure about proceeding with them. There also seemed to be a higher level of commitment to the plan by those teachers. Some of the other teachers appeared to be insecure about other adults in the classroom, or may not have been able to give the additional time required initially to reorganize their own work so that they could capitalize on the additional help. The previous program of the school had apparently explored almost completely the available parental assistants in the school community, and it may have been that earlier loyalties to certain teachers influenced the availability of volunteers for some of the other teachers.

In all, approximately twenty-five parent volunteers were engaged in a regular basis in the program, each working approximately one-half day per week in the school. Of this group twenty-one were identified basically with the kindergarten classroom and the two grade one classrooms. In general they worked during the mornings, concentrating their time on the reading program. In addition some of them assisted with the arithmetic program. From teacher interviews it was determined that the volunteers were regular in attendance, dependable in the assignments given, and capable of carrying out the teacher's instructions in the work assigned to them. In addition to the regular corps a number of other parents who had other duties that restricted their involvement frequently visited when they had additional time and were thus able to meet various long-term classroom needs which could be postponed until the time when they were available.
As a result of the planning time made available to them the teachers developed their own plan for vertical reorganization of the pupils in the primary division. This involved mainly cross-grouping among the various classrooms, and was limited almost exclusively to the reading program. The first children to be cross-grouped were those who obviously required skills at a grade level lower than the grade in which they were registered. This need of course was an outcome of the school's plan for continuous progress of the youngsters. A typical example of this procedure was the placing of a number of grade one children in the readiness units of the kindergarten for particular periods of time.

The second aspect of the vertical integration involved sending to a higher grade level a number of children who obviously were ahead of the various groups in their own classroom and who were sent on a trial basis to the higher reading level. Some of them were found to be not ready for this program and were returned to the basic group from which they had come.

The third dimension of the vertical grouping was the identification of pupils who could be sent to a younger or older classroom for particular skills such as vocabulary, phonics, etc. These pupils were fitted into existing programs at the other grade level. Apparently few if any other special provisions had to be made. This procedure typified the work-saving aspect of the plan for vertical integration, in view of the fact that neither teacher involved had to prepare additional work for the pupils concerned.

These types of transfer of pupils in the reading program continued throughout the year. Obviously the procedures required a flexible plan of reorganization, opportunities for the teacher to identify particular needs of individual children, and opportunities to discuss progress on a continuing basis with the other teachers. In some respects the organization
plan actually reduced teacher work because it provided for a more efficient
grouping of the children so that teachers did not have to prepare lessons
for additional small groups at the two extremes in the range of reading
levels within each classroom.

The main activities of the teachers during the reading period each
morning involved diagnosing reading difficulties, determining levels of
readiness for reading and teaching new skills to individuals or small
groups of children. In addition, the teachers spent some time each day
listening to individual children read. However, the bulk of the oral reading
was heard by the parents. In fact, this represented by far the largest
use of parent time, and constituted the most important contribution of the
parent to the program. The reading assignment for each student each day
was recorded in an individual progress book for each pupil. In this book
the parent also recorded observations concerning the child's progress and
any difficulties encountered. In this way the teacher provided not only
for special directions to assist the volunteer, but also was assured of
a continuing vehicle for communication about and monitoring of the progress
of the individual child. The author's observations of this procedure
leads him to believe that this is an almost ideal procedure for monitoring
pupil progress and determining the level of readiness of the individual
learner. In addition, it provides on a continuing basis an ideal form of
communication among all the parties involved.

In structured interviews teachers were asked to identify the specific
tasks carried out by volunteers, particularly as they related to the
individualized reading program. In order of the amount of time given by
parents to the program, the following activities predominate: listening to individual children reading orally; asking individual children questions about the story they have read; practising word drills; introducing new words to individual pupils; working with individual children using specific training materials; marking pupils' work; reading to groups of children; preparing teacher-directed materials such as word lists, stencils, etc.; and testing individual children on word recognition, alphabet knowledge, etc. In addition, certain parents printed stories dictated by the children who were not ready to print their own stories. The volunteers also performed many other tasks of the classroom which were more or less unrelated to the individualized reading program. These activities included drilling in mathematics, remedial instruction in mathematics, marking pupils' work, assisting with the housework aspects of the classroom, cutting stencils, entering information on various reports, helping children with clothing, working on bulletin boards, etc.

The teachers reported a number of important changes in their own work. Most important to the teachers was the fact that time was available to them for planning together the reorganizational and diagnostic aspects of the program. They reported that much more time than in previous years was given to discussing programs, initiating and administering program changes, assessing the growth of individual students and evaluating the results of their activities and making revisions as required. In the process they became much more aware of the individual needs and progress of the pupils. This benefit accrued not only from their own closer working relationship with individual students but also from the constant communication in the
individual pupil's progress book. It was evident that the observations of parents contributed greatly to these insights about individual students.

Another benefit identified by the teachers was that much more time was directed to initiating new learning and much less to what the teacher called routine listening to children read. The reorganization of the teachers' activities resulted in each session with the individual child having a deliberate purpose, usually related to diagnosing readiness or problems, or initiating specific new reading skills. Another advantage pointed out by the teachers was that children who needed special help were not only identified sooner but could receive on a one-to-one basis with the teacher or a volunteer a much longer period without interruption by other pupils. The teachers noted that the amount of adult time spent with each individual was multiplied several times.

A significant finding in the view of the author was that the teachers were able to initiate, maintain and administer both the reorganizational change and the volunteer program with a minimum of outside help. During the first year in this school, when the volunteer program was first organized, the project team contributed several hours weekly to recruiting, training, maintaining, adapting and supervising the volunteer program, in addition to giving the teacher concerned instruction in the reorganization of her classroom. During the current program the outside help was deliberately reduced in order to determine whether the teachers could themselves maintain the volunteer program and at the same time initiate and administer the reorganizational plan which they had conceived. The success that the kindergarten and grade one teachers in particular had in carrying out this program is a tribute to their commitment both to the individualized reading
program and to the volunteer activities in the school, and is evidence that with a measure of support either from outside team or from their principal the teachers of primary sections in other schools would no doubt be able to repeat the experience of these teachers in order to meet individualized reading needs.

At the same time, the reader should recognize that some of the teachers had difficulties in maintaining a volunteer program and of becoming involved to a high degree in the plan for vertical integration of their classes. While one is tempted to attribute these difficulties to what may be perceived as a limited pool of volunteer help, a more probable explanation has to do with teacher security and the commitment and assistance to the program of educational leaders outside the classroom. It probably is unrealistic to expect that a division of a school can maintain both the volunteer program and a major organization program without substantial help from either the principal or consultants.

The author proposes to explore a similar plan in at least two other schools in the forthcoming school year, involving a procedure whereby both the primary division and the junior division within each school attempt a similar activity with the support of the principal and one or more outside leaders.

EVALUATION

Reference has been made in the preceding sections to various aspects of evaluation of the program, namely teachers' perception of the ability and reliability of the volunteers, documentation of the activities of the volunteers, the teachers' stated advantages to themselves, and the overall successes and shortcomings in the teachers' attempts to reorganize and
implement a plan for vertical integration. The one aspect of evaluation which requires further reference is the area of benefits to students and particularly student gains.

The general benefits to pupils are neatly summarized in a paragraph in the final report of one of the teachers who states,

"We feel that the children benefitted by the program. Certainly they enjoyed it and we as teachers felt that we were meeting individual needs and yet not spreading ourselves too thinly. A greater concentration of time was spent on particular skills in the classroom because the needs were not as diverse and widespread as they normally are in a classroom. By cross-grouping, rather than merely by streaming classes, you can constantly reassess and change the program as the children grow and change."

Evidence of the benefits to the student are shown in the formal evaluation of student gains tabulated in Tables 15 to 26. In each of the tables the information provided is a comparison between the growth of the students in the grade one program matched against either control groups or normative growth data in the particular area for a one year period. The control test data are based on a grade one class in the school and a grade one class in a neighbouring school. The normative growth data for the tests employed is taken directly from the test norms for the age group. Incidentally, it will be noted that both sets of data are quite similar. The availability of the control data on the grade one classes, coupled with the fact that the grade one pupils were in the centre of the cross-grading pattern and therefore probably derived the most benefits from it, accounts for the use of the grade one pupils as a group for evaluation. It is unlikely that the students beyond the grade one level, where the amount
of volunteer help was less and the extension of the cross-grading grouping was more limited, would show as large pupil gains as those registered for the grade one pupils.

Because of the importance to be placed on pupil gains as the ultimate criterion for the success of the program, and because the evaluation was concerned with differences in student gain over an extended period, a complete pre-test and post-test design was employed. Individually administered tests were used because of the age of the pupils. The Peabody Individual Achievement Test was used for the assessment of achievement in mathematics, reading vocabulary, reading comprehension, and spelling, as well as a total achievement score. These tests were administered under controlled conditions by experienced research officers from the Niagara Centre. Every care was taken to obtain fair and objective results. On the basis of observations of the testing procedures administered there is no reason to suspect any bias which would benefit the experimental group over the normative data or the control group data.

One special feature of the tables and graphs merits special attention. In both the experimental data and the normative data the scores are shown for the mean value of each of three mental age groups. The purpose of this treatment of the data is to enable the researcher to compare the growth gains of pupils in the bottom third, middle third, and upper third of the class, grouped on the basis of mental age. Obviously this treatment retains much valuable information which would be lost in determining averages for the entire class as one group. The procedure has the second value of taking into account the strong relationship between mental age and achievement.
Tables 15 to 18 show the mean values in the four areas tested for each of these mental age groups compared with expected results based on data obtained from the combined control groups. Tables 19 to 22 show the mean values for the three groups compared with the normative values. Tables 23 to 25 show the data for the experimental group and the normative values in graphic form with Table 25 showing the total gain for each group. Table 26 shows the grade equivalent of the scores and gains for the mean of each of the three mental age groups. It should be noted that the totals in Tables 25 and 26 are based on the total test, and not merely on the totals of the four sub-scores. The remainder of the test deals mainly with general information, the inclusion of which tended to depress the total scores for the top and bottom mental age groups, and increases the scores for the middle group.

It will be seen in Tables 15 to 18 that the experimental group showed larger growth gains than the control groups in the three reading sub-scores and a lower gain in mathematic sub-scores. In Tables 19 to 22 one notes that the experimental group showed growth rates higher than the normative values in all but four instances, two being of equal rate and the other two lesser rate (for the middle mental age group in reading comprehension and for the lowest mental age group in spelling).

The gains in the four areas measured, and the total growth gains, shown graphically in Tables 23 to 25, provide the reader with the best general picture of the comparative growth gains of the experimental class with normative values. Certain large gains, particularly in the two areas of reading and in spelling are obviously impressive. When one notes that it is in these areas that the greatest concentration of parent help occurred, and that the special reorganization was related to meeting needs in these areas, one can attribute a large
TABLE 15  Mean Values of Peabody Individual Achievement Test, Mathematics Subscore for Three Mental Age Groups in Each Class, Pre-test and Post-test.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>M.A. GROUP</th>
<th>N</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.A.</td>
<td>MATH</td>
</tr>
<tr>
<td>Experimental</td>
<td>Low</td>
<td>14</td>
<td>73</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Mid</td>
<td>13</td>
<td>80</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>13</td>
<td>87</td>
<td>22</td>
</tr>
<tr>
<td>Expected (based on 2 controls)</td>
<td>Low</td>
<td>14</td>
<td>70</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Mid</td>
<td>17</td>
<td>83</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>14</td>
<td>106</td>
<td>24</td>
</tr>
</tbody>
</table>

The graph shows the raw score progression with respect to mental age for the experimental and control groups, indicating an increase in performance from pre-test to post-test.
TABLE 16
Mean Values of Peabody Individual Achievement Test, Reading Recognition for Three Mental Age Groups in Each Class, Pre-test and Post-test.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>M.A. GROUP</th>
<th>N</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Low</td>
<td>14</td>
<td>73</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>Mid</td>
<td>13</td>
<td>80</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>13</td>
<td>87</td>
<td>99</td>
</tr>
<tr>
<td>Expected</td>
<td>Low</td>
<td>14</td>
<td>70</td>
<td>85</td>
</tr>
<tr>
<td>(based on 2</td>
<td>Mid</td>
<td>17</td>
<td>83</td>
<td>90</td>
</tr>
<tr>
<td>controls)</td>
<td>High</td>
<td>14</td>
<td>106</td>
<td>116</td>
</tr>
</tbody>
</table>

---

![Graph](image-url)

- **Experimental**
- **Control Group**
TABLE 17 Mean Values for Peabody Individual Achievement Test, Reading Comprehension Subscore for Three Mental Age Groups in Each Class, Pre-test and Post-test.

<table>
<thead>
<tr>
<th>CLASS GROUP (based on 2 controls)</th>
<th>N</th>
<th>PRE-TEST M.A.</th>
<th>Comp.</th>
<th>POST-TEST M.A.</th>
<th>Comp.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>14</td>
<td>73</td>
<td>15</td>
<td>82</td>
<td>22</td>
</tr>
<tr>
<td>Mid</td>
<td>13</td>
<td>80</td>
<td>19</td>
<td>92</td>
<td>27</td>
</tr>
<tr>
<td>High</td>
<td>13</td>
<td>87</td>
<td>22</td>
<td>99</td>
<td>34</td>
</tr>
<tr>
<td><strong>Expected</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>14</td>
<td>70</td>
<td>16</td>
<td>85</td>
<td>26</td>
</tr>
<tr>
<td>Mid</td>
<td>17</td>
<td>83</td>
<td>16</td>
<td>90</td>
<td>26</td>
</tr>
<tr>
<td>High</td>
<td>14</td>
<td>106</td>
<td>16</td>
<td>116</td>
<td>27</td>
</tr>
</tbody>
</table>

![Graph showing raw scores vs mental age with lines for Experimental and Control Group]
### TABLE 13
Mean Values of Peabody Individual Achievement Test, Spelling Subscore for Three Mental Age Groups in Each Class, Pre-test and Post-test.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>M.A. GROUP</th>
<th>N</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.A.</td>
<td>Spell.</td>
</tr>
<tr>
<td>Experimental</td>
<td>Low</td>
<td>14</td>
<td>73</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Mid</td>
<td>13</td>
<td>80</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>13</td>
<td>87</td>
<td>20</td>
</tr>
<tr>
<td>Expected</td>
<td>Low</td>
<td>14</td>
<td>70</td>
<td>18</td>
</tr>
<tr>
<td>(based on 2 controls)</td>
<td>Mid</td>
<td>17</td>
<td>83</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>14</td>
<td>106</td>
<td>19</td>
</tr>
</tbody>
</table>

**Graph:**
- **Experimental**
- **Control Group**

**Y-axis:** Raw Score
**X-axis:** Mental Age

**Legend:**
- Pre-test
- Post-test
TABLE 19 Comparison of Mean values of the Peabody Individual Achievement Test, Mathematics Sub-test for three Mental Age groups in the experimental classes, Pre-test and Post-test, using Normative Data.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>M.A. GROUP</th>
<th>N</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.A.</td>
<td>Math</td>
</tr>
<tr>
<td>Experimental</td>
<td>LOW</td>
<td>14</td>
<td>73</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>MID</td>
<td>13</td>
<td>80</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td>13</td>
<td>87</td>
<td>22</td>
</tr>
<tr>
<td>Normative</td>
<td>LOW</td>
<td>14</td>
<td>73</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>MID</td>
<td>13</td>
<td>80</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td>13</td>
<td>87</td>
<td>22</td>
</tr>
</tbody>
</table>

![Graph showing Pre-test and Post-test levels for Experimental and Normative data.]
TABLE 20  Comparison of Mean Values of the Peabody Individual Achievement Test, Reading Recognition Sub-test for three Mental Age groups in the experimental classes, Pre-test and Post-test, using Normative Data.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>M.A. GROUP</th>
<th>N</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>LOW</td>
<td>14</td>
<td>73</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>MID</td>
<td>13</td>
<td>80</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td>13</td>
<td>87</td>
<td>99</td>
</tr>
<tr>
<td>Normative</td>
<td>LOW</td>
<td>14</td>
<td>73</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>MID</td>
<td>13</td>
<td>80</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td>13</td>
<td>87</td>
<td>99</td>
</tr>
</tbody>
</table>
TABLE 21. Comparison of Mean Values of the Peabody Individual Achievement Test, Reading Comprehension Sub-test for Three Mental Age groups in the experimental classes, Pre-test and Post-test, using Normative Data.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>M.A. GROUP</th>
<th>N</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.A.</td>
<td>Comp.</td>
</tr>
<tr>
<td>Experimental</td>
<td>LOW</td>
<td>14</td>
<td>73</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>MID</td>
<td>13</td>
<td>60</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td>13</td>
<td>87</td>
<td>22</td>
</tr>
<tr>
<td>Normative</td>
<td>LOW</td>
<td>14</td>
<td>73</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>MID</td>
<td>13</td>
<td>80</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td>13</td>
<td>87</td>
<td>22</td>
</tr>
</tbody>
</table>

![Graph showing Pre-test and Post-test data for Experimental and Normative groups]
TABLE 22  Comparison of Mean Values of the Peabody Individual Achievement Test, Spelling Sub-test for three Mental Age groups in the experimental classes, Pre-test and Post-test, using Normative Data.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>M.A. GROUP</th>
<th>N</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.A.</td>
<td>Spell.</td>
</tr>
<tr>
<td>Experimental</td>
<td>LOW</td>
<td>14</td>
<td>73</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>MID</td>
<td>13</td>
<td>80</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td>13</td>
<td>87</td>
<td>20</td>
</tr>
<tr>
<td>Normative</td>
<td>LOW</td>
<td>14</td>
<td>73</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>MID</td>
<td>13</td>
<td>80</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td>13</td>
<td>87</td>
<td>20</td>
</tr>
</tbody>
</table>

---

![Graph showing Pre-test and Post-test scores for Experimental and Normative classes.](image-url)
TABLE 23 Graph showing growth gains in Mathematics and Reading Recognition sub-scores of experimental classes compared with the expected normative growth gain, both based on identical pre-test levels.
TABLE 24: Graph showing growth gains in Reading Comprehension and Spelling sub-scores of experimental classes compared with the expected normative growth gain, both based on identical pre-test levels.
TABLE 25  Graph showing growth gains in combined test scores of experimental classes compared with the expected normative growth gain, both based on identical pre-test levels.
TABLE 26  Grade equivalents of scores and growth gains in four areas tested with the Peabody Individual Achievement Test, along with total grade equivalents (which includes additional areas of growth not separately treated in the table), for three mental age groups in the experimental classes, based on Pre-test and Post-test results.

<table>
<thead>
<tr>
<th>M.A. Group</th>
<th>Mathematics</th>
<th>Reading Recognition</th>
<th>Reading Comprehension</th>
<th>Spelling</th>
<th>Total Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>High</td>
<td>2.0</td>
<td>3.1</td>
<td>1.8</td>
<td>3.8</td>
<td>2.2</td>
</tr>
<tr>
<td>n=13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.6</td>
</tr>
<tr>
<td>Gain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.2</td>
</tr>
<tr>
<td>Mid</td>
<td>1.3</td>
<td>2.4</td>
<td>1.4</td>
<td>3.1</td>
<td>1.9</td>
</tr>
<tr>
<td>n=13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.4</td>
</tr>
<tr>
<td>Gain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.1</td>
</tr>
<tr>
<td>Low</td>
<td>0.9</td>
<td>1.9</td>
<td>1.0</td>
<td>2.0</td>
<td>1.0</td>
</tr>
<tr>
<td>n=14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>Gain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.7</td>
</tr>
</tbody>
</table>
part of the gain to the reorganizational plan and the volunteer help, indicating an overall success of the program in terms of pupil gain.

An analysis of the pupil gains based on grade equivalents is equally impressive. As noted, in all but four of the twelve cases studied gains in excess of 1.0 years' growth was documented, with two of the remainder being 1.0 years, and the other two being .9 and .7 years, one for each of two mental age groups. Some of the growth gains, particularly in reading recognition and reading comprehension are outstanding. The greatest gains in these two areas were made by pupils in the highest mental age group, a finding which suggests that the volunteer help enabled this group to proceed with new vocabulary at a higher rate than expected. The author also anticipates that these pupils were most inclined to seek additional help when needed, rather than to wait for the teachers and volunteers to identify their needs. The greatest overall growth gain, however, was made by the middle group, an outcome which repeats the finding in the previous volunteer study in the same school. Again, the teachers' own daily observations predicted this outcome; the teachers stated that the volunteer program enabled students in the middle of the group, who ordinarily are overlooked, to receive a fair share of adult attention. No doubt the reorganizational plan, which demanded a constant monitoring of pupil progress, also contributed to the increased attention to the middle group.

This program has demonstrated that a division of a school can plan and initiate a reorganizational change and can also maintain and administer a volunteer program, and can combine these two activities to produce demonstrated pupil gains over both a control group and the normative gains for the grade level concerned. A program of this kind makes two contributions that are of
concern to teachers: greater opportunities to work with other teachers, and demonstrated improvements in pupil growth. For these reasons a study of this kind if widely disseminated should improve both teacher satisfaction and pupil performance in many schools.

The fact that the teachers in this program were able to bring about these two related innovations with a minimum of outside administrative or consultative help encourages us to recommend the program to other schools. However, teachers are not likely to bring about this kind of double-headed change without a measure of support and encouragement from both their principal and outside consultants. Educational policy within a system must support this kind of program if there is to be any hope that teachers will expend the time and energy required to implement it. Evaluation practices within the school system must focus on direct evidence of student growth if teachers are to be expected to implement programs of this type. Finally, the idea of capitalizing on volunteer assistance in a school community must receive continuous approval and support from educational leaders if teachers are to continue to explore the ways in which such assistance can be utilized to bring about improved programs.

In conclusion, this report establishes that the three relatively small and limited programs in this project have brought about improvements in school practice. However, the preparation and dissemination of this report alone will do relatively little to change general school practice. The Niagara Centre will continue to disseminate the results of this project, in cooperation with the Ministry and with local school officials. But if the implications of this and similar projects are to produce real benefits in schools throughout the
province the author believes that the Ministry must continue to encourage both school boards and its own consultants to study, evaluate and encourage projects which demonstrate practical benefits in schools.
APPENDIX

1. General Model
2. Some Suggested Tasks for Volunteer Parents
3. Some Special Ideas
4. Sample Recruitment Letter
5. Recruitment Questionnaire
6. Objectives, Advantages and Potential Outcomes of Parent Volunteer Programs
7. General Bibliography
8. Selected and Annotated Bibliography
9. Taxonomy: Classroom Observation Schedule
10. Manual for Categorizing Functions
11. Volunteer Talent Bureau Questionnaire
12. Ministry of Education - Bill 128 Amendment - Schools Administration Act
13. Teachers' Federation Board of Governor's Approval of Parent Volunteers.
14. Halton County Board of Education - Student Volunteer Anecdotal Interview Form.
15. Halton County Board of Education - Teacher Anecdotal Interview Form: Re Volunteers
AN OPERATIONAL MODEL

The operational model for developing and implementing a program of volunteer parental assistance in elementary schools is presented as a comprehensive plan which can be applied or modified to meet the conditions and needs of any elementary school that wishes to formulate a systematic volunteer program. The model has been implemented successfully in a number of schools with minor modifications.

Because any plan reflects certain objectives, the major goals of the present model should be identified. They are the enhancing of pupil achievement as an outcome of improved parental attitudes; improved home-school communication; significant additional help in the classroom; and the improvement of parents' "teaching" skills.

It will be noted that the phases, and steps and sub-steps of the model are in chronological order. Also mentioned are proposed materials at points where they apply. The initials S, P, T, and V refer to the groups or persons who bear the main responsibility for initiating and/or implementing the step, namely: Staff, i.e. principal and teachers (S); Principal (P); Teachers (T); and Volunteers (V).
OUTLINE OF THE MODEL

PREPARATION PHASE

1. Analysis of readiness
2. Identification of the major needs of the school
3. Identification of alternative solutions, including volunteer assistance
4. Discussion of potential of volunteer program
   - study information concerning existing practices
   - add books, manuals to professional library
     (see bibliography in appendix)
   - visit established programs (optional)
   - gather information concerning objectives
     (see objectives list in appendix)
5. Decision to proceed with plan
   - reach general commitment
   - identify participating staff members
6. Agreement on objectives of program
   - set up an order of priority of major objectives
7. Identification of guidelines for long-range evaluation of program
8. Preparation of list of initial tasks for volunteers
   (see initial task lists in appendix)

RECRUITMENT PHASE

1. General information meeting with parents (optional)
   - involve existing parent organization (optional)
2. Decisions on recruitment policies
   - test policies against objectives
   - decide on general types or pools of volunteer service
     (regular, on-call, talent bureau)
3. Preparation of recruitment letter with attached questionnaire
   (see sample letter and questionnaire in appendix)
4. Organization of files of volunteers in each pool
5. Evaluation of recruitment procedures
   - publish list of volunteers to staff
   - assess success of procedure
   - plan, if necessary, to enlarge initial pool by alternate recruiting procedure, e.g., telephone, interview, or home visit
INDUCTION PHASE

1. Initial meeting with volunteers
   - explain objectives, advantages of plan
   - outline general procedures
   - answer major concerns of parents
   - discuss policies concerning assignment, responsibility, confidentiality, attendance procedures, etc.

2. Assignment (or selection) of volunteers for each teacher or team

3. Preparation of pupils for volunteer participation
   - establish role and responsibility of volunteers
   - clarify discipline and procedures

4. Preliminary visit(s) of volunteers to assigned areas
   - discuss program, organization, supplies, etc.
   - cover and discuss initial tasks
   - discuss manual handling

5. Initial volunteer service
   - supervise volunteer tasks
   - set up procedures for openness of communication
   - explain volunteer’s activities
   - record, add assignments
   - provide training for tasks where necessary

6. Information to authorities and public concerning initial phase of program

MAINTENANCE PHASE

1. Subsequent regular participation by scheduled volunteers

2. Procedures for "promoting" volunteers to more demanding tasks
   - assess ability and reliability of volunteer and needs of the classroom
   - determine and reflect interests of volunteer
   - maintain open communication

3. Planning of informal training sessions as required to carry out specific roles (remedial, audio-visual, library procedures, etc.)
3. Planning of informal training sessions as required to carry out specific roles (remedial, audio-visual, library procedures, etc.) (S)

4. Procedures for dealing with major difficulties
   - maintain frank discussion of concerns and revise tasks as required (T)
   - re-assign certain volunteers after consultation with staff (P)
   - recruit from on-call corps to fill in for emergency absenteeism (P,T)

5. Procedures for involving "on call" pool (a) as replacements; (b) for special periodic needs (P)

6. Procedures for classifying resources of "talent bureau" and making information available to staff (P)
   - plan general procedures for contact with resource volunteers (S)
   - consider use of a volunteer for contacts (S)

7. Attention to staff requests for additional regular assistance
   - conduct second "wave" of recruitment (P)
   - explore possibility of volunteers as recruiters (P)
   - assess possible transfer from other pools to regular pool (P)

EVALUATION PHASE

1. Development of evaluation procedures
   - reaffirm priority of objectives (S)
   - analyse effectiveness of daily evaluation and communication (S)
   - identify main criticisms and weaknesses (S)

2. Meeting of principal (or staff) and volunteers after initial implementation
   - establish a purpose and suitable interval after initial meeting (P)
   - explore informally expressed attitudes and outcomes from parents' point of view (S,V)
   - discuss criticisms, suggestions, and questions from volunteers (S,V)
3. Assessment of outcomes of above meetings, and modification of procedures as merited

4. Formal evaluation in keeping with priority of objectives (6 - 10 months)
   - assess attitudes of parents, teachers, pupils
   - assess effectiveness of volunteer service on extension of help to teachers
   - measure changes in teacher activity, i.e., time spent in various functions (see taxonomy, observation schedule, and manual)
   - measure changes in amount of time spent by adults with individual pupils
   - measure changes in amount of time pupils spend in major activities e.g., oral reading
   - assess effects of program on pupil performance

5. Evaluation of the model

EXTENSION PHASE

1. Revision of model in light of evaluation

2. Analysis of need for special forms of coordination of program
   - assess additional administrative load
   - consider relationship to existing parent groups
   - consider use of one or more volunteers as coordinators
   - assign specific coordination roles to staff

3. Addition of subsequent groups of volunteers
   - assess need for additional help
   - assess use made of on-call and "talent bureau" pools
   - record other major changes

4. Procedures for transferring certain learning activities to homes (optional)
   - organize group training sessions
   - prepare or provide parents' manual
   - hold problem sessions
   - involve parents in evaluation of their work

5. Extension of model to meet broader or more specific needs
   - assess potential for special education, individualized instruction, supervision to permit staff time for curriculum development, etc.

6. Policies and procedures concerning visitors (teachers and others) wishing to observe the program.
7. Development of basic organizational structure needed to maintain program into new school year without "re-starting" the model (S)

8. Consideration of formal recognition of volunteers' service

9. Preparation of year-end report to board of education, press, parents and the community (S)

   - consider value of having an oral report made to board by a committee (principal, teacher, volunteer parent) (S)

   - invite press to observe and describe program (P)

   - document major aspects of program for school records, to include samples of forms, materials, and letters used during the introductory year (P)
Some Suggested Tasks for Volunteer Parents

Note: This list is not complete. We would appreciate your contributions to the list. The tasks listed are not equally applicable to all grade levels. Many of these tasks would not be initial tasks for the volunteer, but rather would be ones that volunteers could be assigned as they demonstrate ability and reliability.

Clerical

- Collecting lunch and milk money
- Requisitioning supplies
- Keeping attendance records
- Filing reports
- Writing for free materials
- Maintaining pupils' cumulative records
- Entering marks in record books
- Averaging marks
- Entering marks on report cards
- Keeping records of books pupils have read
- Keeping inventory of equipment and supplies
- Preparing seating plans
- Preparing library cards
- Typing, duplicating stencils, etc.
- Typing children's stories
- Typing, duplicating class newspaper
- Typing, duplicating school open letter to parents
- Duplicating scripts for plays, etc.
- Maintaining a file of representative work of each pupil
- Filing resource materials for each unit
- Setting up parent-teacher interviews
Classroom Maintenance and Administration

Supervising seatwork
Supervising work areas
Mixing paints, etc.
Assisting with art aprons, drop cloths, etc.
Arranging instructional materials for lessons
Distributing, collecting, washing, storing equipment
Supervising clean-up time
Assisting with coats, overshoes, etc.
Keeping bulletin boards neat and current
Maintaining general housekeeping of room
Assisting with blackboard care
Writing assignments on blackboard
Preparing kindergarten refreshments
Arranging interesting study areas, such as reading area, science corner, etc.

General Non-Instructional

Assembling related supplementary books
Selecting films, filmstrips for lessons
Assembling, selecting pictures for lessons
Proofreading class newspaper, etc.
Collecting test papers, projects, homework, etc.
Assembling resource collections, indexing and storing, e.g., artifacts, minerals, leaf prints, maps, etc.
Organizing a master picture file
Organizing a 35 mm film slide file
Organizing filmstrips into an integrated collection, catalogue and card file
Obtaining specific materials for science, social studies lessons
General supervision of classroom at specific times
Supervising indoor games (breaks, rainy days, etc.)
Checking library books in and out
Helping pupils select library books
Making arrangements for special speakers
Supervising instructional games (e.g. math games)
Displaying pupil work in various ways
Performing routine health tasks—measuring and recording height, weight, routine eye chart
Administering routine first-aid
Attending sick or injured pupil
Telephoning re sick pupil; taking child home when necessary
Accompanying injured child to doctor, home or hospital
Telephoning re absentees
Telephoning, if necessary, to verify notes re pupil leaving early, etc.
Supervise club meetings
Assisting or supervising special pupil committees (constructing, rehearsing, experimenting, etc.)
Helping pupils settle quarrels, disputes
Helping in organization, rehearsal, etc. of programs, assemblies, etc.
Setting up special exhibits in classroom or school
Supervise individual study carrels
Monitoring study hall
Caring for pre-school children during teacher-parent conferences, etc.
Helping supervise field trips
Assisting with special 'errands'
Supervising tests.

Audio-Visual Assistance

Ordering, rewinding, returning films etc.
Reproducing sound tapes
Setting up and removing AV equipment
Operating projectors
Organizing, instructing pupils as AV operators
Preparing overhead projectals
Reviewing films and filmstrips
Preparing brief introductions as background for viewing
Maintaining AV equipment (oiling, cleaning lens and gates, checking lamps, cords, etc. on regular schedule, such as once per month). Perhaps one qualified father would do this.

See also suggestions re master picture file, 35 mm slide file, and integrated filmstrip file and catalogue.

Prepare catalogue of resource materials in school and special resources (persons and materials) in the community.

Instructional

Preparing objective tests, e.g. spelling lists, marking tests.
Preparing pupils' profiles
Checking homework
Checking record books using teacher criteria
Observing, describing specific behaviours
Preparing instructional materials—flash cards for mathematics and reading, cutouts, towing cards, alphabet cards, drill card sets, transparencies, models, etc.
Collecting, organizing, arranging displays to be used in lessons.
Teaching a group to play an instructional game (e.g. math game)
Preparing special learning material to meet individual needs or differences, e.g. special study guides, sample programs, taping, reading or math material for less or more advanced pupils, etc.
Teaching or re-teaching specific skills or concepts to special groups
Tutoring individual pupils
Helping individuals with work missed because of absence, etc.
Reviewing content, skill of previous lessons
Repeating parts of lessons for slower learners
Assisting pupils with specific learning tasks and recording in book or file for individual
Assisting with routine spelling, punctuation on request as pupils write stories or compositions
Listening to pupils read orally; record difficulties
Instruct pupils in proper and safe use of tools and equipment
Teach etiquette, good manners, etc. to small groups
Listen to pupils read their own stories
Prepare special demonstrations in art, science, etc.
Provide musical accompaniment
Tell stories to groups or class
Assist in group discussions
Help pupils discover and select research and reference materials
Dictate spelling, number drill work, etc.
Supervise groups in laboratory work
Write assignments, etc. on blackboard
Drill individuals or groups with word, phrase, phonetic mathematics flash cards, identification cards, etc.
Prepare and present lesson or unit on an enrichment or special interest topic.

Note: Most of these ideas will not apply equally well in all situations. Also, many of them do not apply to the initial stages of volunteer assistance, but may be both practical and useful later on as volunteers demonstrate ability and reliability. These ideas tend to be rather general in nature. For more specific ideas refer to my supplementary list of classroom tasks.

1. No teacher should be expected to involve parent volunteers until he/she wants their help and is able to identify various tasks or roles that volunteers can perform.

2. It is advisable to begin with one volunteer, who is prepared to work one-quarter or one-half day per week on a regular basis. With experience, volunteers may be added for other parts of the week, and/or more than one volunteer may be engaged for specific periods.

3. Before the volunteer is brought into the program he/she should meet with the principal, and if possible, with the teacher, at which time general school policies should be considered, the aims of the volunteer program should be discussed, the interests and abilities of the volunteer should be identified, and the fact should be established that because the principal and teacher are responsible for the program the volunteer will work in keeping with school policy and under the guidance and direction of the staff.

4. All parties concerned should recognize that misunderstandings and problems can usually be avoided if an open climate for communication is established and maintained.
5. All parties must realize that volunteer assistance programs inevitably result in some degree of sharing of privileged or confidential information about pupils, the teachers, and the school. To avoid problems, emphasize that with respect to such information the assistant must maintain a professional attitude, and that in fact his/her increasing involvement in the program will be influenced by the reliability shown.

6. Most volunteers will be motivated by intrinsic rewards, mainly the satisfaction derived from knowing one is making a worthwhile contribution. The volunteer, then must experience success in doing a worthwhile amount of significant work. Consider then, the following: (a) making sure there is enough for the volunteer to do, preferably with slightly more work organized than can be accomplished in the time available; (b) arranging some reference by the teacher to the importance of the volunteer's work to the class; (c) providing for "feedback" by the teacher, and where appropriate, by the pupils to enable the volunteer to evaluate his/her contribution; (d) the identification and gradual "promotion" to more complex, demanding or responsible tasks as the volunteer becomes able to handle them; do not assign tasks that are too difficult.

7. Periodically it may be useful to recognize volunteer aid in other ways; reference at H & S or P T A meetings; article in newsletter or newspaper; a social event; an annual report to the Board of Education; etc.

8. Consider the possibility of encouraging volunteers to recruit others into the program as needed.

9. Consider values of having a special work area in the school where the volunteers can work at special tasks.
10. Decide on the staff-volunteer relationships, e.g. coffee breaks, staff room, etc.

11. Establish a clear policy for occasions when a volunteer is unable to be present.

12. When a volunteer assists more than one classroom, or several members of a teaching team, decide in advance how his/her assistance is to be allocated.

13. In addition to specific classroom tasks, volunteers might assist in meeting some general needs that may exist in a school, as follows:

   a) Maintaining an individual file for each pupil. Representative samples of the pupil's work, periodic tests, art, compositions, reading lists, etc., should be dated and filed weekly in the file. This file provides data for progress reports, diagnosis, and parent-teacher interviews and enables the teacher to "keep track" of the individual's work and progress. Place work daily in a box for filing weekly by a volunteer.

   b) In some schools that use volunteers to assist with individual work, each pupil has an individual progress record book. In it the teacher writes brief notes or assignments for the volunteer, relating to particular needs of the pupil. The volunteer records the success or progress of the pupil after the assignment has been carried out, and returns it to the teacher. This record book is also valuable in parent-teacher interviews.

   c) Librarians and library resource teachers make good use of volunteers in cataloguing, carding, shelving, and repairing books, thus freeing them for more time in helping teachers and pupils with reference work, planning, and organization of resources for teachers' units.
d) One approach to the continuous need for good pictures to use in lessons is the school or library picture collection. Volunteers can assume most of the responsibility for preparing and maintaining a master picture file. Pupils are good picture collectors. Make decisions about criteria for selecting pictures, standard mounting, alphabetical or subject filing, and borrowing and returning procedures.

a) If you have a fairly large filmstrip collection, there probably is a need to integrate it by subjects, and to develop a card catalogue of titles and cross-references. A capable volunteer could organize and maintain this file with staff direction. A similar service might be organized in duplicating, housing, filing, cataloguing sound tapes. Refer to Department's taping service for ideas.

f) A wealth of 35 mm colour slides is available (as originals or duplicates) from distributors, teachers, parents, local photographers, etc. The drawback in using them is usually a lack of organization and filing. Now available are inexpensive 3" x 11" plastic sheets with 20 pockets for slides. These can be filed and stored in regular 8" x 11" binders, and can be indexed by subject, country or other classification. A volunteer could organize and maintain this service, under supervision of a librarian or teacher.

g) Very fine lithographed reproductions of great art (Old Masters, Canadian, Modern, etc.) are available at modest cost (e.g. $5.00 - $10.00) from various distributors. A school, or several cooperating schools on a rotation basis, may wish to employ this method of developing art appreciation. Donations may be made by individuals or by H & S or P T A (an ideal investment by such groups). One or more fathers could be recruited to
construct or select an inexpensive standard frame, and to mount pictures. A volunteer could manage or assist with general organization and maintenance.

A related project is the preparation of a number of standard inexpensive frames and mats for displaying in school halls, typical art work of pupils. The use of a standard matt and temporary mounting procedure enables frequent changes to be made. A volunteer might assist with or manage this project.

h) Some schools maintain a current master-pupil file and a permanent pupil history file. The former uses a card for each pupil mounted alphabetically on a Rolodex wheel for quick reference. The card may show address, parent's name, siblings in school, a small photo from a class picture, etc. When a pupil leaves the school by graduation, transfer, etc., appropriate data is recorded and the card is transferred to a history file which provides a permanent record of pupils having attended the school.

i) Instead of relying on your memory to recall the tasks you wish a volunteer to perform, try posting a large envelope into which you can drop brief notes as various tasks occur to you. Then you and the volunteer can together establish priorities among the tasks assigned, and the additional tasks will ensure that the time of the volunteer will be fully used.

j) In several schools in Cincinnati every pupil transferring into a school is identified for a time with a volunteer who assists him in adjusting to the school and the program.

k) In Minneapolis several schools have one or more volunteers who help identify, catalogue, and make arrangements for special resources (artifacts, models, materials, products) and special people (artists, actors, musicians, skilled craftsmen, hobbyists, collectors, naturalists, scientists, historians, pioneers, ethnic representatives, etc.) to come to the school or to arrange.
or accommodate field visits. Frequently ethnic representatives can contribute information, pictures, records, artifacts, clothing, folk-lore, songs, dances, etc.

1) Many teachers have every pupil keep a list of all books he has read. With volunteer assistance this list could be maintained from year to year, either in the library or in the pupil's individual file.

m) Many schools in Ohio recruit volunteers to assist with a Great Books program, in which the volunteer meets groups of pupils after school to introduce and discuss good books.

n) A popular activity of volunteers at upper elementary and high school levels is in reading pupils' compositions, thereby enabling teachers to have pupils do more such writing. The volunteer usually does not formally evaluate the writing, nor does he/she focus on minor errors; instead, the volunteer selects, encourages and gives further guidance to one of the best features of the written work.

14. Remember that a successful volunteer program does more than help teachers and pupils directly with their work. It improves parent-teacher communication, has a positive influence on parents' attitudes, enables parents to learn more about instructional procedures, and improves community support for the philosophy, program and resources of the school.

Volunteer Parent's Assistance Project
H. G. Hedges - Niagara Centre, O.I.S.E.
Sample Recruitment Letter

Dear Parent:

The main purpose of this letter is to inform you of our plans to (establish, expand) (a, the) parent volunteer program at [school]. As a staff we have made a study of existing programs for volunteer assistance in other schools and believe that such a plan would have many advantages in this school. Therefore, as a staff we have decided to explore the possibilities of a parental volunteer program in the school. We hope to establish a group of regular volunteers helping in the school on a half-day per week basis along with a body of general or part-time volunteers to assist at special events and to help out when a regular volunteer is unable to be present. We wish also to identify the special talents, hobbies, or interests of parents that might be shared to broaden and enrich our curriculum.

The volunteer parents in the classroom will not work solely in housekeeping or supportive roles, but will actually be assisting the teacher with some of the middle-level instructional tasks, such as story-telling, listening to pupils read, marking work, providing drill and review experiences, and other related duties.

The responsibility for the educational program in the classroom will remain that of the principal and the teacher, but with proper planning and organization the teacher will be able to spend more and more of his or her time on planning programs, providing individual opportunities for the youngsters to move along at their
pace, organizing the classroom for the most efficient learning to take place with the help of volunteers, and diagnosing pupils' learning difficulties, so that suitable remedial instruction may be arranged for the learner.

With the above introduction to our plans for volunteer parental involvement this year, I would like to invite you to consider whether you would be willing, as a parent, to participate actively in our volunteer program. We hope to involve some fathers as well as mothers.

Past experience has shown that some parents are reluctant to volunteer because they believe that a high level of skills is required in a volunteer. We believe that enthusiastic volunteers should be accepted at the level of contribution that they are able to make and then provide them with opportunities and training to assist in the school and to improve their own skills in various areas. The assistance of parent volunteers in other schools in the province has led to improved understanding of school programs, a sharing of information about the learners, better attention to the needs of individual pupils, valuable assistance in meeting some of the objectives of the school program, and a better general level of communication between the school and the community that it serves.

Parent volunteers in other schools tell us that they like the opportunity to share in the school program, to watch the progress of individual pupils and to feel the satisfaction that comes from helping youngsters learn.

We hope that you will give serious consideration to serving as a volunteer in our school. One or more meetings with the volunteers
will be held before parents are assigned to teachers or classrooms. Would you kindly complete and return the attached questionnaire by

Sincerely,

Principal.
QUESTIONNAIRE RE: PARENT VOLUNTEERS

1. Would you be willing to serve as a volunteer in school on a regular or part-time basis?
   Yes        No
   Comments:

2. Regular Assistance
   (a) Would you be prepared to volunteer on a regular basis for approximately one-half day per week?

   (b) On what half-days would you be available as a regular volunteer?
       First choice
       Alternates

List any special experiences, talents or training that you believe might enable us to make best use of your volunteer assistance. Example, group leadership; filing; typing; music or art ability; dramatic or athletic competence; librarian or teacher, etc.

3. Part-time Volunteers
   If you are not able to assist on a regular basis, would you be willing to serve "on call" when you are free to help, provided that advance notice is given?
   Yes        No
   Comments:
NOTE: 1. You may volunteer as both a regular and part-time volunteer if time is available.

2. A meeting with volunteers will be arranged as soon as the lists are complete.

4. Other comments, or other contributions you would volunteer.

5. Questions or concerns that you would like us to consider.

Name: ____________________________ Address: ____________________________

Phone No: ____________________________

Children at (name of school)

______________________________ Grade _____

______________________________ Grade _____

______________________________ Grade _____

______________________________ Grade _____

______________________________ Grade _____
VOLUNTEER PARENTS' ASSISTANCE PROJECT

H. G. HEDGES

NIAGARA CENTRE, THE ONTARIO INSTITUTE FOR STUDIES IN EDUCATION

OBJECTIVES, ADVANTAGES AND POTENTIAL OUTCOMES

OF

PARENT VOLUNTEER PROGRAMS

January 20, 1982.
In response to numerous requests for statements of objectives or advantages of volunteer programs, we have prepared this statement as a result of our study of the topic and our observations and experiences in Ontario. Because our activities have been mainly with parental volunteers, we propose in this document to confine our discussion to the objectives, advantages and potential outcomes of volunteer programs which involve parents. This is not to suggest either that other volunteers are less capable than parents, or that many of the advantages and objectives would not apply to these other volunteers. It is simply that our experience enables us to speak with conviction only about parental volunteer programs at this time. No doubt the reader from his own thinking on the subject and his own experience will be able to add to the list.

The particular order and weight that one gives to objectives of any program have an effect on the plans and operation of that program. For this reason, we have included at the top of our list of objectives those two or three which we believe are most important in developing such a program, and which are prominent in the models we have been developing and implementing.

1. Parents' Attitudes

The reader is invited to study the findings in the National Survey reported in the Plowden Report, which shows that parental attitudes account for
more of the variation in pupil achievement than do either conditions of the school or characteristics of the home. The apparent importance of positive parental attitudes on pupil performance gives us cause to consider the ways of improving, altering, or enhancing parents' attitudes. Volunteer programs in schools appear to be one of the most effective means of influencing parents' attitudes toward the school.

2. **Mutual Exchange of Important Information**

Parents and teachers both have concern and responsibility for the development of pupils, and both have important information about the pupil. By improving communication between parents and teachers there exists the possibility that this important information will be more openly shared by both parties, with the potential effect of enhancing the pupil's learning experiences both at school and at home. A program in which parents learn to work comfortably in the school provides opportunities for more open and frank exchange of important information about learners.

3. **Real Help in the School**

Most principals and teachers state this as the prime objective of volunteer programs, and from the point of view of the professionals in the school this is a perfectly reasonable position. The apparent size of potential volunteer manpower pools in most school communities would make this objective seem a realistic one. Some of the special kinds of school service that volunteer helpers can provide are indicated in the following section.

(a) **General Classroom Service**

In numerous classrooms parents participate a half-day a week on
a regular basis assisting the teacher with tasks performed under her direction. While initially most of the tasks would be regarded as supportive and supervisory in nature, the evidence is clear that volunteers also are able to perform many tasks at the lower instructional levels, as well as many tasks representative of most of the major functions generally performed by teachers. Our project has published lists of some of the dozens of specific tasks that volunteers commonly perform in classrooms.

(b) **General School Help**

In the early stages of the development of volunteer programs the main kinds of assistance were with general school needs such as typing and filing, assistance with library supervision, etc. These needs and opportunities continue to be met by volunteers in many schools.

(c) **Special Talents**

Among the volunteers are many who have special resources or special talents based on professional or other experiences. Many of these special talents can be shared with pupils either within the basic program of the school or through various kinds of optional programs.

(d) **Individualizing Instruction**

There exists a real possibility that the effective use of volunteers may enable schools to meet better their plans for matching programs to the needs, interests and abilities of individual learners. Observations indicate that youngsters get more individual assistance in volunteer programs than in the same classroom prior to the introduction of such programs.
(e) **Special Education**

Some of the most rewarding programs of volunteer work, both to the volunteer and to the school, are those in which volunteer assist individuals who have special learning problems. A greater attention to the selection of volunteers for such programs may be necessary than is necessary for typical classroom service activities.

(f) **Curriculum Development**

With an increasing focus on the local school as the basic unit for curriculum development, there is an accompanying need for more time for curriculum planning by school staffs. The potential for relieving staffs for curriculum planning for specific periods each week through an effective and well organized volunteer program should be further explored.

(g) **Professional Development**

The needs in a school for programs of professional development and for opportunities to experiment may be matched or met by effective programs whereby volunteers can take over some of the more routine functions of the classroom and thereby enable the teacher to spend more of his or her time on higher level and experimental activities.

4. **Support for Innovations and Other Changes**

The development of volunteer programs and the resulting improvement in the exchange of ideas between the school and the home should improve the understanding and acceptance of innovations in schools.
5. **Identification of the Community as a Resource for Schools**

Volunteers may be aware of resources, not only among themselves, but in the community more broadly, and may be agents whereby some of these resources can be mobilized for use in school programs.

6. **Broadening School Programs**

The addition of short optional school courses relating closely to pupils' interests may be provided with adequate competent talent bureau assistance by volunteers.

7. **Positive Approach to Home Assistance with Learning Problems**

A volunteer program in the school should enable the parent to intervene in his child's learning difficulties on a more positive or supportive basis than has sometimes been the custom in the past when the parent was not aware of the learning difficulty until a real problem was recognized. It seems sensible to involve the parent at times other than in the crisis situation of remediation of a failure on the part of the child or the program. An ongoing plan for parent participation in the child's learning would avoid such crises.

8. **Enhancing Parents' Skills as Teachers**

A parent involvement program in a school is based on a belief that parents are in fact "teachers," although neither certificated nor professional. The possibility of the school becoming more aware of the role of parents as teachers will, in turn, lead to the improvement of parents' skills as teachers. Many volunteers have stated that they have applied at home some of the things that they learned while in schools.
9. Bridging the Gap Between Home and School

The possibility exists in volunteer programs for ensuring that the home and the school are complementary phases in the lifelong process of learning. The school will stand less in isolation from the rest of the child's experiences if his parent is involved in the school.

10. Developing Interest in Pre-School Movements

As professional educators and the public become more and more concerned about the early childhood years in relation to subsequent formal education we may need to turn our attention more toward the possible roles that parents can play in preschool educational programs whether at home or in school.

11. Building a Stronger Base for Community Support - Financial and Other

It could be argued that in the long run the financial and philosophical support for schools will depend more on the feelings, beliefs, commitments and views of parents than of any other group in the community. Parent volunteer programs can reasonably be expected to enhance or support positive attitudes in this respect.

12. Closing the Generation Gap

Some authorities suggest that the so-called generation gap exists from a lack of sharing of common tasks or common activities by parents and their children. The improved participation of parents in their youngsters' formal education should have some effect on closing this gap, at least to the extent that it is caused by a lack of mutual concerns or activities.

13. Providing Opportunities for Community Service

Anyone planning a volunteer program should consider the motivations of the volunteers as well as the needs of the school. Some of the
most commonly expressed feelings of volunteers relate to the intrinsic satisfaction they derive from providing important worthwhile service to others.

Enhancing the Human Touch in the School

Some schools that use volunteers in their program state that such participation enables the school to consider to a higher degree the particular interests and needs of youngsters and also provides more opportunities for youngsters to talk to an interested adult than would exist without such volunteer assistance in the school.

A Final Point of View

The purpose of volunteer programs has nothing to do with altering pupil-teacher ratios or providing a "cheap" education. They are intended to improve education, in the short run by adding human resources to the classroom, and in the long run by enhancing parents' attitudes and skills. In both phases the pupil is the one who gains most; however, in a successful volunteer program the volunteer receives recognition and satisfaction to compensate for service rendered. Unless a program recognizes and to some degree satisfies the motivations of volunteers, it is unlikely that they will continue to donate their services.
A General Bibliography

This bibliography includes books, manuals, and reports, as well as periodical articles on the subject. The longer references usually contain information on developing a volunteer program, while shorter articles generally discuss objectives and activities. If the reader wishes to refer to only a few selected works, we suggest the use of our supplementary Selected and Annotated Bibliography on the topic.


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A Selected and Annotated Bibliography

The references in this bibliography were selected because they make particular contributions to one or more aspects of the topic. For a more extensive list of reference, refer to our companion, General Bibliography, on this project.


Allen, the late Commissioner of Education in the United States regarded the volunteer as an essential partner in the 'Right to Read' program which is being promoted in many parts of the United States.


Although not specifically on the topic of volunteers this book introduces the reader to the role that parents do play as teachers, and how this role can be enhanced.


This manual suggests ways in which a talent pool of volunteers in an entire community can be recruited, developed and then assigned to a variety of community needs and institutions, including schools.


Like many of the periodical articles on the subject this article is testimonial in nature. Nevertheless, it contains much useful information about volunteer programs, including a number of interesting examples.


This is one of a number of curriculum guides written for use in parent-training programs in the preschool movement.


This program was initiated by parents and other citizens and outlines procedures whereby by parents may assist with reading at the early school level.

This model involves a training program for parents, assignment as volunteers in schools, and intervention in the home to improve the home climate as it relates to learning.


This is fairly general and considers the number of ways in which parents may be involved in the work of the school.


This guidebook is prepared mainly for parents of pupils in their first year of school, except that it contains many interesting and practical suggestions whereby parents can assist youngsters in their early orientation to school programs. The instructional role of parents is also considered.


This detailed book describes how to set up and organize special studies centers and tutorial programs mainly for after-school assistance to youngsters with particular learning difficulties.


This is one of the few articles dealing with the preparation of teachers who will be involving parents in classroom activities.


This manual deals mostly with ways in which parents can enhance school programs through varying kinds of intervention at home.


Written by a school administrator, this book deals with a number of kinds of lay assistance in the school, including volunteers. The suggestions are clear and specific.


Anyone initiating a volunteer program should read the results of the National Survey in the Plowden Report, in which the correlations between parental attitudes and variations in pupil achievement are described.

This manual provides fundamental information for volunteer parents at the nursery school level.

Robb, Mel H., Teacher Assistants - Columbus, Ohio, Charles E. Merrill Publishing Company, 1959, 132 pp.

This is probably the best general book on the subject of volunteers in schools. It deals with both para-professionals and volunteers, and describes carefully the various stages of development of a particular kind of parental involvement program. The book also contains brief descriptions of a number of special programs for parent-volunteers.


This manual was prepared for parents in an experimental primary school in which parents were assisting at home, as well as in the volunteer program at school.

Robinson, Floyd; Brison, David; Hedges, Henry; Hill, Jame; You, Cecilia; Palmer, Lee, Volunteer Helpers in Elementary Schools, Toronto: O.I.S.E., 1971.

This pioneer book on volunteer helpers makes two contributions to the topic not found in any other reference, an intensive survey of the manpower and activities of volunteers in one hundred sample schools in the Niagara Region, and a classification system for analyzing the functions performed by adults in classrooms. Several case studies are also described.


This fairly lengthy article analyzes the roles now being played by paraprofessionals and volunteers. Its publication in a Canadian journal enhances its value.


This is one of the best manuals on the subject. It contains stages in developing a plan for volunteer help, describes some existing programs, and suggests forms and materials that may be needed in the program.


This is undoubtedly the most surprising reference in the literature. The author describes clearly guidelines for activist parental groups to employ in bringing about changes in the school. It is not a book on volunteers in the usual sense of the word.

This is the most detailed guidebook for volunteers working in any particular kind of program. Many of the instructions it gives indicate the relatively responsible role that a well-trained volunteer might perform.


This is a very useful general manual on the subject, containing many ideas, examples of existing programs, forms and materials to be developed, etc.
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The purpose of this manual is to instruct observers in classifying classroom activities of teachers, paraprofessionals and volunteers into their appropriate category in the taxonomy of classroom functions, and in recording the duration of each activity. Some of the directions refer to the use of a standard observation sheet on which the twenty-two functions are arranged, with six cells following each function, in which the recorder determines the grouping used (class, group, individual), and whether each group was regular or special for the activity in question.

In using the observation schedule in the classroom, the observer should note the time of the beginning and conclusion of each activity and enter the time elapsed in the appropriate cell following the function in which it is most appropriately included. Thus the observer must consider three questions for each activity:

1. What function in the schedule is being performed?
2. Is the function performed with the class, a group, or an individual?
3. Are the learners operating in their regular grouping or are they organized in a special group during this time?

In categorizing an activity, the observer must decide what the major function is at that time. It is recognized that many activities may have elements of several functions within them. For example, in taking up pupils' answers to seatwork, there may be elements of motivation, evaluation, and diagnosis, but in most instances the taking up of seatwork will be an integral phase of one of the four instruction sequences, and will most likely be a part of B. of D., that is, consolidating a new concept, attitude or skill, or consolidating content (see Section 3, Instruction Sequence).
Similarly, the giving of oral instruction in most cases is part of the instruction sequence rather than of supervision. In general, the nature of the instructions will be the clue to the function. If the purpose of the instruction is to have students use the skill to discover new content, then "adding content" is the correct function. If the instructions are part of a seatwork exercise that implies drill or implies a standard of performance, then "consolidating content" applies. During active supervision a teacher may provide incidental short periods of diagnosis and remediation, but such activities are themselves characteristic of active supervision, and are quite different from more formal or more enduring evaluation, diagnosis, and remediation periods. When, during supervision the teacher spends more than a half-minute in an activity belonging in another function, it should be recorded in the function to which it logically belongs.

It should be emphasized that the observer is recording the functions of the adult(s) (teacher or volunteer) in the classroom and not the activities of the pupils.

At times, the teacher or volunteer being observed may actually be performing more than one function simultaneously. For example, it is common practice for a teacher to supervise passively one or more groups of pupils engaged in seatwork while conducting reading lessons, discussion groups, or other forms of formal instruction with a specific group. In fact, this is the usual practice in multi-graded classrooms. In such situations, the observer will record the function to which the adult is devoting his/her major attention, which in most cases will be the instructional role rather than the supervisory-one. However, when the adult interrupts the major function to give attention to the second-function for more than a half-minute, obviously the second one will be recorded as the one to which the adult's time is devoted for the period of time that applies.

The observer is not concerned with whether the function is being performed well or poorly. All records should be made at the time—the observer should not rely on his memory to recall what function was performed. If at any time he is uncertain as to what function is being performed, he may have to consult the adult later to verify or revise his conclusion. The timing of such cases should be circled, and a note made of the concern. Observations which may seem impossible to categorize should be timed also, with a brief note made for future consideration and categorization. One of the categories provides for these situations:
The section that follows provides a definition and description of each of the functions in the schedule, with examples to illustrate that function. These examples will indicate the range that is represented in the category, from the more demanding to less demanding activities.

1. **PLANNING**

Planning refers to establishing a purpose and the formulation of a scheme, outline, system, method, or set of materials to be used to achieve that purpose. Planning may be done alone, with other adults, or with pupils. Sessions with other teachers, in which the team is working on curriculum or organization are recorded as planning. Discussing with a volunteer the activities to be performed will usually be considered planning, as will periods in which the teacher and one or more pupils are planning a future unit, lesson, or activity. Thus, for a teacher planning goes far beyond writing lesson plans or units. It will include most aspects of organization of the content, lessons, seatwork, etc. for the class, but not the routine mimeographing or distribution of materials. The selection of appropriate materials, the previewing of visual aids, the studying of a teacher's manual, etc. are all examples of teacher planning. While the greater percentage of a teacher's planning generally occurs out of class time, nevertheless many examples of planning of future activities may also be observed during the school day.

(a) **Broad Planning**

This function applies when the adult is involved in planning a series of activities over an extended unit, course or series of lessons. Long-range or broad planning will include one or more of the following: setting objectives; defining the skills, concepts, or attitudes to be developed; preparing an overall scheme, structure or framework of learning activities; arranging for interrelationships among important stages or ideas, and integrating the new learning with other aspects of the curriculum. The planning of a month's unit in a particular subject would represent a demanding aspect of this function. The least demanding activity that would fit in this function would be the planning of a short series of lessons; the planning of one lesson would not belong in this category. The following would be examples of broad planning: preparing a mathematics unit on graphs; evaluating a number of books to be used in a unit; outlining or writing a series of dramatic presentations in social studies; planning curriculum guidelines or materials with other adults; selecting or previewing a set or series of audio-visual materials to be used in an extended series of lessons.
(b) **Specific Planning**

This function is performed when the adult plans a specific activity, plans one lesson, or plans and prepares the materials to be used in one lesson or a short series of lessons. The broadest examples of this function would include the planning of all aspects of one or two lessons. The least demanding examples would be those in which the adult plans only one or two elements of a single lesson, such as by previewing a filmstrip. Those activities in which one adult does the basic planning and another adult merely applies the plan of the other will not be considered in this function for the second adult. Some examples of specific planning are: the selection of materials from books; organization and presentation of a set of film slides relating to a particular lesson; the planning and construction of a model, game, map, chart, etc. for use in a lesson; the practising, in advance, of a skill to be taught; the preparation for presentation of a single lesson; the surveying of an area for a field trip; the selection of a film to enrich a lesson for unit; the writing on the board of a seatwork exercise not prepared in advance of such writing; the outlining of a specific assignment to another person who will carry it out and the planning of a future activity with one or more pupils. The assessing of a pupil’s readiness to proceed to the next stage in a learning sequence, an activity frequently associated with individualized programs, belongs in this category; the function of diagnosis as defined later implies, in this manual, the consideration of the cause of errors or difficulties. Thus assessment of readiness belongs in “specific planning”, but diagnosis of weaknesses belongs in “diagnosis”. In situations where teachers assign individual work, as in individual progress books, the writing of such assignments in considered to be specific planning.

2. **Motivation**

Included in this function will be any activity whose basic purpose is to interest, stimulate, or encourage the learner with respect to the school program, or to provide him with a goal, reason or motive to act in a certain way or to initiate or persist in some type of activity. The observer will not include in this category the numerous incidental forms of motivation such as brief and incidental reactions to correct answers, incidental approval or praise, and moves listed under guidance and support (below) which relate mainly to behavior. The observer must discriminate between deliberate moves, usually at the beginning of structured lessons, in which the intent is to focus interest on a topic (motivation), and interesting teaching methods which have the purpose of facilitating learning.
rather than focusing attention; the latter may reflect the quality or effectiveness of another function in which they should be classified. The purpose of motivation, as defined in this category, is related to specific, deliberate encouragement to become mentally involved in some aspect of the school program.

(a) Broad Motivation

The kinds of motivation which provide for a long-term interest in some phase of the program will be included in this category. They may range from such activities as discussions of the value of mathematics, of ways of working more effectively and of developing positive feelings about other cultures, to activities as narrow as creating sustained interest in fractions or a continuing appreciation of bird life. Such activities as reading stories to the pupils for the purpose of developing appreciation of the language, or making use of art objects or records to develop appreciation of art and music will be regarded as broad motivation.

(b) Specific Motivation

Those forms of motivation that relate basically to the developing or identifying of interest in a specific lesson or problem will be considered specific motivation. It may be as broad as encouraging pupils to look for examples of decimals in the day's newspaper or as narrow as challenging them to find the answer to a specific problem. The relating of a specific problem, concept, skill, or attitude to relevant, and particularly current out-of-school experiences will be regarded as specific motivation.

3. Instruction Sequence

This section deals with those activities designed to initiate, reinforce, consolidate and make use of new learning. The section is divided into the four subsections that follow, each of which deals with one of the four related functions in instruction. Following the descriptions of the four functions, examples are provided to illustrate the relationships among these functions. Distinguishing between the four functions is particularly difficult when they do not occur in their natural sequence. They are most apparent in formal, structured lessons, but can be identified in less formal situations, if it is established that at the time the teacher is engaged in instruction rather than in supervision. The key to the functions in their apparent purpose, whether (a) initiating a new structure or schema; (b) consolidating or reinforcing a tenuous new concept; (c) adding content, i.e., using the new idea; and (d) consolidating the content by review, drill, a game, etc.
(a) **Initiating a Concept, Attitude or Skill (Mental, Motor, or Social)**

The criterion for determining whether an activity belongs in this category is whether the volunteer is initiating new learning which has a broader application, as opposed to providing reinforcement, application, practice, or remedial instruction of a concept, attitude, or skill initiated in earlier instruction. The key question would be: "Is a new attitude, skill or major concept being introduced in this activity?" One cannot expect to observe this function in every "lesson". Unless new learning is being initiated, the activity belongs in one of the next three categories. In some subject areas, this function will serve to establish a schema, generalization, principle, skill, or structure which will be applied in subsequent lessons, as in learning a map skill, a classification system in science, a new procedure in mathematics, or a social skill such as leading a discussion.

The initiating of a skill will involve activities as major as an introductory lesson on writing a business letter or "carrying" in addition, or as narrow as introducing a phonetic combination or introducing a specific style of writing a particular letter of the alphabet. Some examples of activities that would belong in this category are: introducing the addition of decimals; teaching pupils to locate the parts of a flower; teaching how to find a specific land form on a map, or to divide a sentence into bare subject and bare predicate; introducing how to use the card catalogue in the library, how to greet and welcome a visitor, how to pitch a softball or how to mix paints for watercolouring.

(b) **Consolidating a New Concept, Attitude or Skill**

The purpose of this function is to consolidate the learning of a new concept, attitude or skill, prior to adding new content or applying the new learning to other situations. The emphasis must be on consolidating new learning itself. In most instances, it will occur immediately after the initiation of the new learning, and generally occurs within the same "time-table" period, that is, as part of the same lesson. This function may include recognition and immediate reinforcement of the new learning, a limited amount of trial practice, simple test procedures, diagnosis of general difficulties with the new learning, re-teaching, suggestions for refinement of the skill, etc. Activities in this category may be as broad as having pupils write a paragraph to apply a specific skill, or as narrow as having them practise writing a letter of the alphabet, listing and reading words with a common phonetic pattern, and trying a specific basketball shot. Some typical examples of this function will be assigning a single arithmetic question designed
to consolidate a particular skill; finding examples of a specific land form on a map; having several pupils go to the board to try examples of the new concept, or having pupils explain the process through which the new concept was acquired. Included will be those situations where the object is trial or initial practice, and immediate reinforcement or initial improvement of a skill itself—whether in printing, writing, reading, physical training, cooking, sewing, etc.—rather than the application of the skill to content or to new situations, or the long-term practice of the skill to achieve certain standards of performance.

(c) Adding Content to Structure: Applying New Learning to Other Situations

In general the activities that belong in this function are those in which a new concept, attitude or skill is being used beyond the context in which it was learned, so that new content is being associated with or added to the mental representation of the concept or skill. For example, if the skill of using a leaf-key has been introduced, then the use of that key in identifying new and unknown leaves will fall in this function. Similarly, if the skill of using a card catalogue in the library has been introduced, helping pupils use this skill in hunting out books on a particular topic fits this function. Other examples are: having pupils use Cuisenaire rods to find new number facts; using the rule "i before e" in spelling new words. Activities within this function may be as broad as applying a specific map skill to locate particular information such as the boundaries of a country, its rivers, its principle cities, etc. or as narrow as having pupils list examples, whether they be words, places, animals, etc., in which the application of a skill has enabled the learner to develop new content; for example, if a student has been taught the skill of identifying nouns, then the listing of the nouns in an exercise would come within this function. Some further examples of this function are: reading for information, describing a number of birds after having learned the skill of describing a typical bird, using a skill in music to work out a new melody or to play a melody not formerly played, etc.

(c) Consolidating Content

The intent of this function is to arrange for further practice, drill, review, integration and consolidation of new content. Reference to or the application of external standards of performance, such as percentage of correct answers, place or efficiency of performance, etc. will almost automatically place the activity in this function unless it is clear that a test (evaluation) is being employed. The provision of opportunities for practice to attain certain standards will identify such an activity with this function. The teacher may apply this function as broadly as in reviewing the voyages of an explorer, or this function may be as narrow as drilling such content information as the names of provinces and their capitals. Drilling
with flash cards, doing a series of mathematics problems, writing out spelling words, etc., all of which imply certain standards of performance, are obvious examples of this function. Similarly, helping pupils write up the results of a science experiment to consolidate this experience, preparing a summary of a social studies lesson, retelling a story, practicing a song, playing a mathematics game (but not learning the game itself) would all be activities designed to consolidate content.

Examples Illustrating the Four Functions in Instruction

Example 1: Developing the Concept of Addition (Mathematics)

(a) Initiating the concept. This function would include only the activities that would lead the pupil to acquire the idea that sets can be joined together and that this process is addition.

(b) Consolidating the concept. Further examples are used to strengthen the mental representation of the process of adding, by providing experiences that reinforce the idea to the point where the pupil can employ the process without external prompting, for example, he might combine (add) rods or sets of objects and count the sum.

(c) Applying the new learning to other situations. Using the mental representation of the process of adding the combined sets, the pupil now creates new number stories by using the process, e.g., combining 4 and 3 to discover that $4 + 3 = 7$.

(d) Consolidating content. The number story $4 + 3 = 7$ would be rehearsed or drilled, either by itself or with other number stories, to the point where the correct response is given to meet a standard such as within two seconds without counting.

Example 2: Learning to Identify Minerals by Hardness

(a) Initiating the concept. This function includes activities which enable the pupil to form the concept that hardness is a fixed property of minerals and that by scratching one mineral with another or with certain independent objects, hardness of these materials can be compared. The emphasis is on the fact that minerals and objects can be compared with each other in terms of hardness, a fixed property.

(b) Consolidating the concept. In this function a wider variety of minerals and objects are tested to see whether the concept can be applied to them; as yet an index is not developed.
(c) Adding content to structure. Using the concept, pupils compare minerals and develop an order, or index, of hardness and check it against an accepted hardness scale. Using the index or scale, pupils learn to identify new examples of minerals.

(d) Consolidating new learning. Pupils review or practise the use of the scale, by sorting out minerals from a random selection, to the point where they can fit known or unknown minerals into the scale with less than 10% error.

Example 3: Developing Positive Attitudes Toward Japanese People.

(a) Initiating the attitude. In this function, pupils will be exposed to a situation where a positive response will be expected. This might have to do with a Japanese design, artifact, game, etc., or with an event or situation (e.g., 1970 World's Fair in Japan; 1972 Winter Olympics, etc.).

(b) Consolidating the new attitude. The pupils' positive response is identified and encouraged in one or more ways such as repeating the response, discussing positive features, imitating or repeating the situation, etc.

(c) Applying new learning to other situations. The initial response is applied to broader situations, such as other aspects of Japanese life. Again positive reactions are encouraged.

(d) Consolidating further. Opportunities are given for reviewing the experiences, relating some aspects of them, integrating several related aspects, etc., to the point where open or positive attitudes toward Japanese people, stories, etc., are observed in automatic positive responses to pertinent situations.

4. Supervision

Activities to be classified as supervision are those in which the volunteer is supervising the work of pupils, who in turn are working more or less independently of the supervisor. In general, supervision will relate to the seatwork applications of lessons. However, it will also be observed at such other times as in art periods, when the pupils are creating new products or developing new ideas, and also during discussion sessions in which the pupils are working together on common ideas or common goals, or in physical education periods when pupils are practising a skill or playing a game.
(b) **Active Supervision**

During active supervision the supervisor actually participates deliberately in the learning activity, either by asking a periodic question, answering questions raised by pupils, referring pupils to sources of information, making incidental diagnosis of pupil progress, making suggestions, pointing out errors, suggesting further questions for discussion, etc. Such interventions suggest that active supervision is taking place. Active supervision, therefore, may include some periodic intervention relating to understanding and consolidating content, or to checking and correcting errors or reinforcing correct learning. Similarly where the supervisor takes an active part in continuing the organization and reorganization of experiences, e.g., as in giving directions on a field trip, active supervision is taking place. In situations where individual pupils or small groups of students are pursuing independent study activities, the observer must constantly be alert to the question of whether the teacher is supervising or whether actual instruction is being provided by the teacher. When the teacher performs an independent function (e.g. initiating new ideas, diagnosing, etc.) for more than one-half minute at a time, the period of time should be recorded in its appropriate function.

5. **TECHNICAL**

The activities appropriate to this function are those which employ a definable technique or procedure which is learned or enhanced through training or practice. The activities in this category will be those of a technical rather than a professional nature; therefore such activities as questioning, story telling, reading to pupils, etc., will not be considered in this category. The range of technical tasks will run from those such as typing and organization of visual aids at the upper level of difficulty, through activities such as the maintenance and operation of equipment, the preparing of stencils, etc., in the middle range of difficulty, to less demanding activities such as running stencils, cutting out pictures, making flash cards, etc. In general, this function will be identified with the use of materials and equipment.

(a) **Skilled Technical.**

In this category are included those technical tasks which require a formal or lengthy period of training and a high standard of competence. Examples are typing, bookkeeping, overall maintenance of a library, maintenance and repair of technical equipment, the preparation of complex teaching aids, the organization of sets of visual aids, complex filing procedures, maintaining of pupil records, etc.
(b) Non-skilled Technical

This category will include those tasks of a technical nature which would require only a short period of training prior to performing the task, or which would require only a short period of on-the-job training. Typical examples would be the operating of simple audio-visual equipment, running mimeograph machines, filing pictures in an established file, carding and shelving library books, assembling laboratory equipment, preparing flash cards, preparing bulletin board displays, etc.

6 NON-TECHNICAL

This category includes activities which are of neither a professional nor a technical nature; thus, the activities in this category require neither skills in questioning, discussing, story-telling, etc., on the one hand, nor skills involving training in the use or preparation of materials or equipment, on the other. This function then includes only activities of a support or maintenance nature such as housekeeping of the classroom and assisting with routine activities of a more or less repetitive nature. Therefore, in this category will belong such tasks as distributing educational materials, collecting materials, cleaning up the classroom, temperature control, ventilation, lighting, assisting with clothing, marking attendance, collecting supplies, collecting routine resource materials, bearing messages, collecting monies, collecting routine information, etc. Also included in this function are special activities such as providing transportation on field trips, and acting as adult companions on field trips when no major supervisory function is required.

7. EVALUATION AND REMEDIATION

Included in this broad category are all those activities which are designed to evaluate or to assist youngsters in evaluating their own progress, to diagnose specific learning difficulties, and to prepare, prescribe, and apply remedial procedures. For the purpose of classifying further the activities which together are considered to be evaluation and remediation, we have set forth seven sub-functions as follows:

(a) Designing of instruments. This category includes all activities related to designing methods or instruments for measuring the pupils' achievement of objectives or goals, including the preparation of devices, check lists, tests, exams, questions, etc., which will enable the teacher to measure or diagnose the progress of youngsters. One exception to this description is the use of a standard of performance within the instruction sequence, (see Instruction Sequence, Part D), wherein the practicing of a skill is related to an external standard of performance. The use of a standardized test does not constitute a part of this function because designing the test is not a part of the activity.
(a) The Administration of Tests. This category includes explaining the nature and purpose of the test, and supervising the actual test-taking, whether the tests are formal or informal and whether teacher-prepared, prepared by volunteers, or prepared by an outside agency. This function does not imply that the test has to be of a long duration or of a formal nature, but will include any procedure which the teacher employs in a systematic or deliberate manner to evaluate the progress of youngsters. The use of a standard of performance in association with the practice of a skill (see Instruction Sequence, Part D), is not included in this category.

(b) Objective Marking. This category involves the marking of tests (including standardized tests), exams, or other items in which the responses are either definitely correct or incorrect and therefore require no significant amount of interpretation. Thus the marking of spelling, in general, would fall in this category, as would the marking of right and wrong answers in arithmetic or any other subject, the scoring of multiple-choice tests, etc., if no interpretation is necessary in determining the correctness or value of the answer or if there is no demand that the marker determine the cause or nature of any error. In objective marking, a number of independent markers would be expected to obtain identical scores.

(c) Subjective Marking. This category involves marking wherein the marker has some discretion in determining the weighting to apply to the score given for any item in the test or any identifiable component of the finished task. In subjective marking it is unlikely that a number of independent markers would mark the test with exactly the same results. Examples of subjective marking will occur in arithmetic problems in which the process as well as the answer must be evaluated and in the marking of art, composition, music, scientific thinking, etc. The oral evaluation of pupils' art, creative writing, etc., which often involves opinions of the other pupils, is included in this category if its nature is clearly evaluative. If, however, the activity is more clearly designed to illustrate alternative ideas or to identify outstanding ideas, the activity is more appropriately recorded as 'adding content to structure' -- Part C of the instruction sequence.

(d) Interpretation of Scores. This category includes using the score to determine the student's placement in the program, determining the range of marks obtained by the pupils, determining whether the test items were too difficult or too easy, too short or too long, whether they were valid for the purposes intended, whether a further test is required, etc.

(e) Diagnosis and Prescription. The activities in this sub-function will be those which relate to determining what the cause of error is on the part of an individual or a group, and what remedy should be prescribed. In performing these functions the teacher analyzes possible causes of the error, such as limited or long-range duration, or whether the error was accidental or reflects a lack of understanding of a skill or concept. For example, the teacher may decide to place
the youngster in a special program for a specified period, or to
re-teach some items to certain individuals or groups, or to modify
teaching procedures. Some examples of specific activities in this
category are: discussions with one or more pupils in which the
teacher analyzes causes of error, and sessions in which the teacher
marks exercises, note-books, compositions, etc. to identify errors
and suggest improvements rather than to evaluate for the purpose of
assigning marks. However, examples of diagnosis and remediation of
extremely short duration or having only incidental application within
the structure of another function, for example, correcting the
identity or pronunciation of a word in spelling or correcting a
minor error in arithmetic, will not be included in this category.

(g) Remedial Teaching. This function includes specific remedial
practices employed with specific individuals or groups, as a follow-
up to diagnosis. It is a planned and deliberate activity, and
therefore will not include incidental re-teaching, or incidental
activities employed merely to clear up minor misunderstandings. In
general, the adult will apply the remediation only to specific
individuals or groups. When a teacher selects individual pupils to
assist, the observer must distinguish between the procedures which
are in fact diagnosis of the learning difficulty, and those which
provide remedial instruction. In special education classes most of
the typical lessons will fit into the instruction sequence except
when specific diagnosis and remediation are provided with individual
pupils.

8. GUIDANCE AND SUPPORT

This category includes the activities of the teacher or the
volunteer that relate basically to the improvement and support of
those aspects of pupil behaviour that are not integral or manifest
parts of the instructional program itself, i.e., that are not
related to the skills and content being studied. Included are those
activities generally referred to as "discipline", but because this
term tends to imply negative and correctional activities, we have
deliberately entitled this category "guidance and support", to
emphasize that it will include both the positive and the negative
aspects of behaviour. Thus in this category will be included such
activities as the following: conversations with individuals about
out-of-school activities, personal and home problems, study habits,
or interests which are not a formal part of the curriculum; activities
designed mainly to establish a friendly positive climate for learning;
and activities or discussions designed to correct undesirable
behaviour or to support and encourage positive behaviour. Incidental
recognition or praise for a correct answer or an approved example of
behaviour within the structure of a lesson or in another category
will not be recorded. The observer must distinguish between this
category and the categories under motivation, bearing in mind that
motivation as defined in this manual relates directly to the content
of the learning program, while the present category relates to
behaviour not directly related to content.
The purpose of this category is to account for periods of time which cannot be included within the previous categories. These are of three general kinds, as follows:

1. **Hiatus**, in which the adult being observed is performing none of the functions in previous categories. Examples will be activities unrelated to school duties, absences from the classroom unrelated to classroom responsibilities, periods of rest, waiting for pupils to arrive, social conversation with another adult, etc.

2. **Interruptions**, during which time another person, such as the principal or other visitor, in effect replaces the teacher or person in charge for a short period of time. The interruption may occur as a result of the direct presence of the other person, or by his indirect presence as through the use of an inter-communication system. However, such planned activities as the use of a television program will not be included in this category; during such periods the adult performs another function, such as passive supervision.

3. **Non-coded.** If the observer is unable to classify certain activities or functions he should include the time within this category, and in the column at the right he should enter remarks that will enable him to recall and describe the activity so that it may be reclassified after further discussion and analysis. Some such entries are activities that the observer simply cannot identify for classification purposes; others may contain a balance or mixture of items from two different categories to an extent that discreet categorization seems impossible.

**General Instructions**

1. The column at the right will enable the observer to make additional comments or record questions about any activity that has been tentatively classified. Circle the timing for activities that are only tentatively categorized.

2. Record the elapsed time for each function to .1 minutes (6 seconds). When uncertain initially about the appropriate function being performed, note the beginning time while arriving at a decision.

3. Be sure that the entire period of time under observation is accounted for, bearing in mind that the last category provides for a number of situations that might otherwise represent losses of recorded periods of time.

4. When there is uncertainty about the categorization of certain activities, short discussions with the adult concerned at an appropriate time may be helpful.
The purpose of this questionnaire is to help us identify and recruit volunteers who have special interests, abilities, talents, backgrounds, or resources which they would like to share with the school. The school has already had considerable experience with volunteer programs which involve community helpers on a continuing basis. Our interest in this questionnaire is with persons who could share special talents with us for one or a limited number of occasions.

May we emphasize that you do not necessarily have to be able to teach a lesson or give a formal talk in order for the pupils to benefit from your talent. In most cases you will work with a small group of students, leading a discussion, giving a demonstration, or answering questions. In our experience we have found that volunteers are quite able to work effectively with small groups.

Would you please answer the appropriate sections of this questionnaire and return it within two days?

Professional or Occupational

Types or work experience that may be beneficial to the school (typing, carpentry, geology, library, banking, mechanic, science, teaching, etc.)
Artistic and Recreational
(e.g. painting, sculpture, crafts, sports, gardening, nature study, travel, sewing, dramatics, cooking, photography, etc.)

Ethnic background
Costumes, dancing, language, etc.

Special Resources
-- pictures, slides, stamps, etc. from other regions or countries
-- collections (art, photos, minerals, plants, etc.)
-- pets
-- antiques and pioneer artifacts
-- other

Special Abilities
-- library, teaching, story-telling, nature hikes, sports, pioneer experiences, camping, etc.

Any Other Talent or Resource
Locale

Would you prefer to help at school or at home?

Conditions or Frequency

How often would you be available to help at the school?
(Please indicate which days and times.)

Comments

Name: ___________________________________________

Address: _________________________________________

Telephone number: ________________________________
VOLUNTEER PARENTS' ASSISTANCE PROJECT

H. G. Hedges

Niagara Centre
The Ontario Institute for Studies in Education

Information on
Regulations of the Ontario Ministry of Education
Concerning Volunteers in Schools

Bill 128: An Act to Amend the Schools Administration Act

(1) Section 18, subsection 2, amended to permit a board to allow the use of voluntary assistants in schools.

2b - "permit a principal to assign to a person who volunteers to serve without remuneration such duties in respect of the school as are approved by the board and to terminate such assignment".

(2) Section 17, subsection 6 is amended to make mandatory the provision of liability insurance for a board and its employees and volunteers assigned to duties by the principal.

(1)6 - "make provision for insuring adequately the buildings and equipment of the board and for insuring the board and its employees and volunteers who are assigned duties by the principal against claims in respect of accidents insured by pupils while under the jurisdiction or supervision of the board."
VOLUNTEER PARENTS' ASSISTANCE PROJECT

H. G. HEDGES

Niagara Centre

The Ontario Institute for Studies in Education

SCHOOL VOLUNTEERS

Approved at the Meeting of the Board of Governors


35. It is the policy of the Ontario Teachers' Federation:

(1) That volunteers in the schools shall mean responsible persons who provide a service to the school to fulfill specific needs, as determined by the principal and the teaching staff directly involved, without reimbursement or contractual commitments of any kind.

(2) That the function of school volunteers is to assist the teacher and/or the school.

(3) That school volunteers shall be responsible to and designated by, the principal of the school.

(4) That school volunteers who work with children shall work at all times under the supervision of a designated teacher.

(5) That school volunteers shall assume no responsibility for any evaluation involving the school personnel, pupils or program.

(6) That school volunteers shall not be included in the calculation of student-teacher ratio.

(7) That any teacher has the right to decline school volunteer services.

(8) That teaching functions which involve decisions-regarding diagnosis of pupil difficulties, prescription of learning experiences, and evaluation of pupil progress are the exclusive domain of the professional teaching staff.
HALTON COUNTY BOARD OF EDUCATION

STUDENT VOLUNTEER ANECDOTAL INTERVIEW FORM

NAME ________________________________ Date __________________________

SCHOOL ______________________________ Interviewer __________________________

GRADE ________________________________

SPONSOR (dept., teacher, or other) ______________________________

SCHOOL WHERE VOLUNTEERED ______________________________

TEACHER/AREA ASSISTED ______________________________

AGE, GRADE, LEVEL OF STUDENTS ______________________________

NUMBER OF TIMES ASSISTED ______________________________

LENGTH OF PERIOD OF ASSISTANCE (average) ______________________________

1. What types of tasks did you perform?

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<tr>
<th>Task</th>
<th># of Minutes</th>
<th># of Times</th>
<th>Size of Group</th>
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2. What were your reasons for becoming a volunteer?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

3. What did you learn from your volunteer work?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
4. In what ways has volunteering changed you? (Skills, attitudes, beliefs, your own views of your abilities, etc.)

5. How did the students you worked with benefit from your help?

6. Estimate the percentage of your total volunteer time that you spent in actual teaching (instruction).

7. Do you believe that good use was made of your abilities?

8. How do you think the teacher benefitted from your help?

9. What problems did you encounter either at your own school or at the school where you were helping?

10. Comments, suggestions for improving the volunteer program.
HALTON COUNTY BOARD OF EDUCATION

TEACHER ANECDOTAL INTERVIEW FORM: RE VOLUNTEERS

NAME __________________________ DATE ______________________

SCHOOL __________________________ INTERVIEWER ______________________

AREA/LEVEL TAUGHT ______________________

AREA OF ASSISTANCE (if applicable) ______________________

No. OF TIMES OF ASSISTANCE ______________________

LENGTH OF TIMES OF ASSISTANCE (average) ______________________

NAME OF THE ONE VOLUNTEER ON WHOM THIS REPORT IS BASED ______________________

1. What types of tasks did this volunteer perform?

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<th>Task</th>
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<th>No. of Times</th>
<th>Comments</th>
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2. How do you feel your students benefitted from this volunteer's help?

_________________________________________________________________________________

_________________________________________________________________________________

_________________________________________________________________________________

3. How did you benefit from this volunteer's help?

_________________________________________________________________________________

_________________________________________________________________________________

_________________________________________________________________________________

_________________________________________________________________________________
4. How was the allocation of your time altered as a result of this volunteer's help?

5. Has the service of this volunteer more than compensated for the additional planning required on your part?

6. How has this volunteer benefitted or changed as a result of this service?

7. What major problems did you encounter with the program in general or with this student in particular?

8. How many volunteers do you utilize on a regular basis? Do you feel this is the ideal number for you?

9. Comments, suggestions for improving the volunteer program.
Elmwood Public School is a small neighbourhood school serving a circumscribed section of the City of Welland, for the Niagara South Board of Education. Its population is 109 pupils, drawn from approximately seventy families. The school is served by four teachers (including the principal) so it is considered to be a small neighbourhood school.

Parental Assistance is not new to Elmwood School. For over a year, one parent has worked regularly at the school in a remedial capacity. Because of this experience, there was a desire to increase the level of parental involvement in the school program. The principal of the school approached Niagara Centre of OISE for aid in this expansion. It was evident that the staff as a whole looked upon the idea of increasing parent involvement with some trepidation, but the interest in improving the school program was such that they were prepared to investigate the idea thoroughly. Accordingly, at a meeting with the staff, the possibilities for program expansion were outlined and a series of questions and issues considered. The staff decided to proceed with an expanded program, and a public meeting was arranged.

At the meeting with parents from the school community, which was very well attended, overall reactions appeared positive. At the same time, several of the questions posed by various parents suggested that there was a little hesitation on the part of some to present themselves to the school as potential contributors in the educational setting. These questions were dealt with as forthrightly as possible, both by the project director from the
Niagara Centre and by the principal and teachers. Because of the positive tone of the public meeting, the school staff proceeded with the implementation of a full-blown parent volunteer program following closely the steps in the Hedges' model.

From that point on, the organization, implementation and operation of the parental assistance program was completely under the control of the school itself. As a result of the response to the survey questionnaires, eighteen parents volunteered for regular duty and eleven wished to be employed as on-call assistants. Therefore, a total of twenty-nine parents representing over forty per cent of the families in the school district made themselves available in the first recruitment for involvement in the school program. This was a highly gratifying response to the school's request for aid. Three losses from this original group were incurred during the year. One parent became ill and was unable to continue with her duties; one parent accepted a job and therefore had to resign from the parent volunteer program; and a third parent wished to be relieved of her responsibilities. Even with these losses, the level of initial involvement by parents in their school is especially notable.

Parents were assigned various duties including originally many of the clerical functions commonly assigned to parents. However, one notable feature of the Elmwood program is that the parents by and large were almost immediately given tasks helping children. This had a very positive effect on the level of parent interest. Most parents spent the majority of their time working on a one-to-one basis with students; however, there were instances when parents worked with small groups of children (usually three or four).
As in many parental assistance programs, the major emphasis of volunteer aid was in the reading program. The greatest visible effect appeared to be that teachers were able to individualize the program to an extent not previously possible. Those pupils most requiring individual attention received it either from a parent or from a teacher whose time was available because of the involvement of a parent in another activity. From this point of view, the major emphasis of the parent volunteer program was as a remedial adjunct to the regular program.

There is one unique and highly desirable feature to the Elmwood project. One parent was not able to work at the school because she has small children requiring her attention at home. However, her level of interest was such that she volunteered to act as "dispatcher" for the program. All of the telephone contact was done through her: when parents could not come to the school at their regular time, they phoned the dispatcher; the dispatcher phoned "on-call" volunteers to make substitute arrangements. Every member of the school staff mentioned this contribution as an immeasurable saving of time for the school itself.

The Elmwood program was evaluated in the same manner as in many other parent volunteer programs. Teachers and parents completed anonymous questionnaires (which most of them signed) and the children of volunteers were interviewed by a research assistant from Niagara Centre. In addition, a matching sample of children whose parents were not involved in the volunteer program were also interviewed. All interviews of children followed the format of the questionnaire in the Hedges' kit.

The evaluation results were overwhelmingly positive. In addition to
praiseworthy comments, some suggestions which might be included in the program in succeeding years were also offered.

The children of volunteers made no negative comments concerning their own parents' presence in the school and in the classroom. They discussed their parents' contributions without any visible embarrassment. Several children commented that their parents discussed with the family at home their activities at the school and all of these children appeared to enjoy the idea of such discussion.

Other children whose parents were not involved in the program gave similarly positive comments. They appeared to know what the volunteers did in the school as well, although they described this involvement in more general terms. They perceived the parents as helpers of both children and teachers. Many children who had been assisted directly by parents recalled the particular nature of such assistance, and appeared impressed with what the parents had been doing. Without exception, these children stated that they would be pleased if their own parents joined the volunteer program.

The teachers reported many advantages accruing to the school because of the parental involvement. The major ones are listed.

1. The presence of parents made it possible for them to individualize the kind of help provided for various children.

2. Teachers were able to extend the range of the programs in the classrooms. They could, for example, prepare more tapes which could be used by more individual students in many of the subject areas.

3. The more intimate involvement of parents in the operation of the school was seen as a positive advantage. This was described as more than
simple public relations; it was perceived as a step toward the basic community cooperation necessary for the optimal development of every child.

4. Various alterations in the role of the teacher were mentioned. Some pointed out increases in the decision-making function while others noted that less time was required for routine operations.

One teacher's summary comment is representative:

"Our program has worked so well that I wonder how I managed before it started. Children, of course, have benefited most of all."

The questionnaires completed by the parents indicated that their perceptions of the school, of teachers, and of their children and other children had all changed. Without exception, these appeared to be positive changes. Many parents reported a genuine sense of achievement as a result of their work in the classrooms, and all are willing to continue with the program next year. They believe that the teachers appreciate their contributions, and they express the hope that more parents will become involved and increase the effectiveness of the school program.

One parent attached a letter to her questionnaire. It is reproduced below because it summarizes the tenor of the parents' responses:

"I am really pleased to be a parent volunteer. I enjoy the children. I find it is a challenge which all parents need to bring them closer to their children. The children spend so much time away from their mothers while at school and learn so much --- that we tend to become dull and unattached; so if we are involved daily we can see how extensive their education really is. Being a part of the system really helps parents understand their children to the fullest. I believe we as parent volunteers are helping the
pupils and in return learning something ourselves."

The following suggestions were selected from the various questionnaires:

1. Increase the scope of the parental assistance program.
2. Provide an in-service training program early in the school year.
3. Increase the effectiveness of communication regarding the operation of the program. Encourage parents who must be absent to call earlier so that suitable arrangements can be made. Provide more effective feedback to the dispatcher.

Elmwood School will have a new principal in September. Many innovations do not survive a change in leadership. It will be interesting to watch the effect of leadership change on this instance of educational innovation. The involvement by parents and teachers is so great and the benefits to the children so extensive and so readily apparent that the prognosis appears positive. The program should continue successfully next year. The parent volunteers, in fact, have already suggested plans for an in-service session early in September; they are ready to resume their service to the school.

Finally, the success of the Elmwood School project in having representation from over forty per cent of its home in the initial stages of its volunteer program should help to convince other schools that with the careful implementation of a deliberate plan one can anticipate responses from a significant cross-section of its community.
VOLUNTEER ASSISTANCE IN SCHOOLS: HELP OR HINDRANCE?

Calgary, March 1973

H. G. Hodges

NIAGARA CENTRE

THE ONTARIO INSTITUTE FOR STUDIES IN EDUCATION

187 Geneva Street

St. Catharines, Ontario

For the past five years there has been growing in schools in Canada and elsewhere a movement that was almost unheard of a generation ago, the direct involvement of volunteers, and particularly parents, as assistants in their children's schools. Our own evidence, based on surveys in the Niagara Region in Ontario, then in Ontario at large, further supported by evidence from the United States, indicates that this movement is still in the early stages of its growth, and will probably represent in the 1970's the greatest single change in personnel in our schools. At a time when questions of teacher-student ratio and restricted budgets come to the fore in conversations with school administrators, one cannot avoid speculating on the possible relationship between volunteer help in schools and those other two issues. To date the trend toward volunteer help in schools and the other two issues are merely running parallel to each other, and one would have a difficult time establishing a cause-and-effect relationship between them. To illustrate this point, we have found in Ontario that in spite of there being volunteer programs in over three thousand schools, none of these schools contends that there has been any causal relationship between changes in either budgets or teacher-student ratio and their volunteer programs. Therefore one might contend that volunteering in schools represents the first major innovation in schools in recent times that has had no relation whatsoever to school budgets, and yet may have an important bearing on the achievement of the school's objectives.
The question of whether volunteer helpers in schools are in fact a help or in reality a hindrance is itself a complex question, particularly if one is prepared to evaluate the question in terms of the effects upon a number of different groups of people associated with the school. If one were to evaluate volunteer programs only from the point of view of principals, one could probably in many instances conclude that because of issues such as confidentiality, extra work for the principal, problems in irregularity of attendance, insurance, legal considerations, questions of public relations, etc., the whole matter might be regarded as at least a nuisance. To suggest this possibility is not frivolous, because in our earliest surveys of volunteer programs in Ontario schools we found that evaluations were done mainly and sometimes solely on the basis of the principal's evaluation based mainly on his own needs. Further evidence of this comes from a recent survey of principals in which we analyzed the questions that principals asked about volunteer programs; of 140 questions posed by principals 50 per cent had to do with problems of the principals themselves, related mostly to security, public relations and legality. The second largest category of questions had to do with teacher security, and the third with questions of implementation. Only the smallest handful of questions related to benefits to teachers and benefits to parents, and of 140 questions only one related to evidence of student growth or student gain! Again, if one asks the question, "help or hindrance?" only in terms of teachers' concerns one is likely to conclude in many cases that volunteer programs are detrimental, because many teachers no doubt find that problems of personal security, extra work, problems of organization, fear of other adults in the classroom, fear of losing control of the class, fear of volunteers being less competent than themselves, and other such matters may lead them to conclude that volunteer assistance is in fact a detriment. Such point of view obviously neglect consideration of the effect of volunteer programs on the volunteers themselves, whether they be parents, elderly people, other adults from the community, students from community colleges, teachers' colleges and universities, artists and other professional people in the community, or secondary school students. Even more important, evaluations of volunteer programs that are confined to the
views of principals and teachers very often neglect the ultimate question of whether volunteer programs in fact enhance student growth.

The question then of help or hindrance must be determined on the basis of the potential benefits and disadvantages to at least four groups of people -- the principal, the teachers, the volunteers and the students. Further, one must consider how much relative weight should be assigned to the advantages and disadvantages for each of those groups. We are prepared to contend that no longer can evaluations of volunteer programs be based solely on the attitudes of principals and teachers, on the assumption that what is best for principals and teachers is by definition also best for students. In looking further at questions of advantages and disadvantages of volunteer programs there may be value in looking at a broad range of objectives and outcomes of volunteer programs in schools, and in the process considering both the theoretical and the research evidence on the subject.

Our own interest in exploring the potential of volunteer assistance in schools was stimulated by the findings of the National Survey of the Plowden Committee Report in England several years ago. You will recall that the National Survey, which conducted a correlation study to determine the relationship between various factors in the youngster's environment and his achievement in school, and which was based on 3,000 students in 170 communities, showed clearly that more of the variation in pupil achievement can be attributed to differences in parental attitude than to either differences in the conditions of schools or differences in the characteristics of homes and communities. Educators have long observed, and have had considerable research evidence to establish that parental attitudes relate strongly to student achievement, but it was not until the late 1960's with the results of the Plowden Committee Report and subsequent studies in the United States that we began to suspect the powerful impact of different parental attitudes on variations in achievement in schools. Our own conviction on the matter of altering parental attitudes is that attitudes are shaped more by experience than by persuasion, and that in the long run we shall probably have to provide parents with a different set of experiences about the school if we intend seriously to have any significant success in enhancing, improving or altering attitudes.
In the schools in which we have been implementing our general model for parental assistance programs we have found marked improvements in the amount and form of communication between parents and teachers. It is clear that both parties have important information about the pupil which often fails to be exchanged for a variety of reasons which may include time available, lack of trust in the other person, formality of presentation, and the inclination for most parent-teacher interviews to flow in one direction only.

Our most important research on the question of the effects of volunteer assistance in schools has been in measuring changes in what teachers state are two of the most important elements of their work in the classroom, the amount of time that they can spend with each individual student, and the percentage of their time that teachers can give to what they regard to be the highest level of professional functions of the classroom. Our claim that these two elements of the teacher's work in the classroom are of greatest concern to teachers is supported by the usual arguments that teachers give against increasing the student-teacher ratio, namely that increasing the number of students in the classroom reduces the amount of time that the teacher can spend with each student and also reduces the percentage or proportion of time that teachers can give to what they regard as the most important functions of the teacher.

Our evidence on this question, then, apparently should be regarded by the profession as being very beneficial. In 150 days of observation in classrooms using a taxonomy of classroom functions which provides a means for indicating the amount of time that teachers spend not only on each of twenty-one functions in the classroom but also on each of six kinds of grouping, including individual attention, we found that even in classrooms where the teacher contends that there is a very high degree of individualization of the program the average amount of time that the teacher spends in a one-to-one relationship with the typical student is 2-1/3 minutes per day. In only a handful of classrooms did we find the average teacher-student contact on an individual basis to exceed 3 minutes, and in a great many cases it was in the range of one-half to one minute per day. One has to question whether a program can truly be considered to be individualized
with these amounts of direct teacher-pupil contact. This is not to suggest that one-to-one contact is the only criterion or element for individualization of program, but we contend that it must be an important element.

In our study we found that when the teacher has even one volunteer working in the classroom the amount of adult, i.e., teacher-plus-volunteer time spent on one-to-one relationships with students increases by almost four times. The teacher approximately doubles the amount of time spent with individual students when a volunteer is in the classroom and the volunteer approximately matches the teacher's amount of one-to-one contact. Obviously, this is an important alteration in the dimensions of individualization resulting from the presence of a volunteer, but I am not prepared to suggest that this comes anywhere close to satisfying the need for a greater amount of one-to-one individual attention, particularly if we are going to give serious attention to our commitment to provide a curriculum that relates to students' needs, interests, styles, and levels of learning.

The other finding that we made in our observations with the taxonomy had to do with the proportion of a teacher's time spent in those functions that are considered to be at the upper level. The taxonomy identifies a wide range of functions that include all observable tasks performed by teachers in the classroom. An accompanying manual defines the placement of individual tasks into these functions. After short periods of training we found that we were able to have classroom observers categorize the time teachers devoted to various tasks into their respective functions with an inter-observer reliability in excess of 90 per cent. The instrument then is a useful device for comparing the allocation of teachers' time on days when volunteers are present and when they are not present in the classroom.

In order to determine what the profession believes to be the most professional, vital or important functions of the teacher the taxonomy and manual were presented to panels of classroom teachers, teacher educators, and school administrators. The individuals in each panel were invited to establish a hierarchy for the 21 functions. We found a remarkable level of concensus both within the panels and among the three panels. As a result of this concensus task we concluded that the profession believes that both forms of planning, both forms of motivation, the initiation and consolidation of
of new learning, and maintaining the climate for learning in the classroom are considered to be the most important seven functions. These seven functions were classified as Level 1 functions. Similarly we were able to set forth the seven functions in Level 2 and in Level 3. Considering the high degree of consensus among the referees, and in the absence of any absolute standard of importance of functions, we regard the hierarchy established as a reasonable standard for judging the significance of alterations in teacher time.

Working with the teachers in three schools we established the stability of the distribution of teachers' time in regular sessions and after a prolonged series of visits began to document the amount of time given to each of the functions in regular sessions and in sessions when regular volunteers were present in the classroom. Some of the conclusions of the study show important effects of the presence of volunteers. The most important outcome was that when even a single volunteer was present teachers appeared to make a natural transfer of time so that an additional 21 per cent of their time was transferred from lower level functions to Level 1 functions. We found that in regular sessions, in spite of their position in the hierarchy only 19 per cent of teacher time was allocated to Level 1 functions. This figure rose to 40 per cent on the days when volunteers were present. This transfer of time, of an additional 21 per cent to Level 1 functions, roughly parallels the findings of the famous Bay City Study of paraprofessionals in which it was found that the teacher who uses a paraprofessional transfers approximately 23 per cent of his or her time to additional Level 1 tasks. We also found that the amount of time the teachers spend on Level 2 tasks, which include adding content to structure, diagnosis and prescription, active supervision, the designing of test instruments, consolidating content, remedial teaching and the interpretation of scores was not greatly altered as a result of volunteer activities in the classroom. Only two of these activities showed marked reductions, namely active supervision and consolidating content. Incidentally, these two functions include some of the largest allocations of volunteer work in the classroom and are the two greatest consumers of teachers' time. It follows that the greatest amount of transfer to Level 1 functions was from
Level 3 functions. The amount of teacher time spent in Level 3 functions is reduced from 25 to 10 per cent when volunteer help is at hand.

Some other more specific observations concerning allocation of teacher time indicate the possibilities of improving instruction in the classroom dramatically by helping teachers deliberately to reorganize the allocation of their time. For example, we found that in spite of the high ranking given to the initiation of new mental structures the average teacher was devoting only three per cent of his or her time to this function. Other observations were even more startling. We found, for example, that the average teacher spends more time on consolidating content, i.e., drill and review, and taking up work, than is spent on the total of the Level 1 functions. Similarly almost as much time is spent on active supervision in regular classrooms as is spent on the total of the Level 1 functions. More time is spent on passive supervision than on any two Level 1 functions combined. These observations concerning the typical allocation of teachers' time suggest that there are many activities of the teacher that with effective volunteer help and additional organizational experience and training on the part of teachers, could be assigned to other personnel in order that teachers could spend an increasing amount of their time on those functions that are truly professional and which relate most strongly to student growth. Incidentally, our findings on the typical allocations of teacher time run parallel to the findings of Hillsum reported in his new book The Teacher's Day. Using a somewhat different taxonomy, Hillsum found that approximately 26 per cent of the typical teacher's day was spent on all types of instructional tasks, 40 per cent on organizational and preparatory work, and 34 per cent on clerical and mechanical duties and supervision.

The evidence in our studies concerning the transfer of teacher time invites, naturally, the question of how the volunteers allocated their time among the various functions in the classroom. We found that the greatest deployment of volunteer time was in non-skilled technical tasks, with large amounts of time also given over to activities that were representative of the functions entitled consolidating content and active supervision. The most common single task performed was listening to students read, which was included in the function "consolidating content". Surprisingly enough
eight per cent of the volunteers' time was actually spent in Level I functions, mostly in the areas of specific planning and specific motivation.

In view of the effects of volunteer help, as documented in our study, on providing for individual attention in the classroom and on the reallocation of teacher time we contend that volunteer help in schools is not only an interesting innovation in the school but may itself become the catalyst for other innovative practices. In the many schools in which we work we find no scarcity of good ideas about innovations on the part of the teachers. Almost every teacher is able to identify a number of organizational or curricular changes that would improve the program of the classroom or school. When tested on the constraints that are preventing these innovations from being practised most teachers point to problems of teacher time or teacher manpower. Considering the number of volunteers available in most communities, along with the evidence that we have collected concerning possible effects of volunteer work in schools, we believe that volunteering may itself provide a means of closing the teacher-time and manpower gap in schools.

Our initial interest, that of the possible alteration of parental attitudes has proven to be a somewhat difficult one to access accurately. In all our evaluations we have treated the question of changes in volunteers' attitudes as one of the most important elements. We are able to say that almost without exception our instruments indicate an alteration and improvement in parents' statements about their attitudes. To what degree parents are able to present deliberately a more favorable picture of attitudes after a period of time in the school is not known to us, but we believe that even their inclination to speak more positively about their own role in the school and about their improved perception of the school is interpreted by most teachers as a positive change. The question of whether the apparent changes in parents' attitude have a direct effect on the improvement of their own children's achievement in school is as yet not adequately evaluated. In schools where we have compared the changes in achievement on the part of students of volunteers and children of non-volunteers we can find no clear distinctions, but, as stated at length later in this address, significant but similar growth gains were recorded for both
groups. It seems probable that the changes in achievement will have long-
term rather than short-term characteristics, and probably will be reflected
more in the affective than in the cognitive areas. In view of the relative
weakness of instruments used to evaluate the affective domain in schools
we are at a loss as yet to establish clearly the effects of improved or
apparently improved parental attitudes on their own children's achievement.

On the other hand, we have increasing amounts of positive informa-
tion concerning the improvement of parents' insights about the school and
about learning. Many of the parents can both describe and demonstrate im-
provements in their skills as parent-teachers. Most of them express greater
understanding and appreciation of the wide range of tasks performed by the
teacher. Many parents remark on the diversity of needs that must be met
in classrooms. An increasing number of parents become involved at home in
school-related instructional tasks. In fact our centre prepared the parents'
manual which some of you have examined as a means of providing for parents
of primary children opportunities to instruct their youngsters in school-
based curricula at home. We advise parents who use this manual to work on
a one-to-one basis with their child for approximately ten minutes a day.
This seems like a minimum amount of time, and one would question whether it
could be expected to have any important effects until one considers that 10
minutes a day at home actually more than quadruples the amount of adult-
child direct one-to-one contact during that day.

Turning now to our broader range of volunteer programs, I must
state that our first efforts in implementing a general model for a compre-
hensive volunteer program several years ago was in a very limited number
of schools in which we worked closely with the staff to explore, alter
and implement the plan. The general model, which is available on request
from the Niagara Centre of O.I.S.E., has now been applied in a very large
number of schools in the province.

Following the testing of the general model we became involved in
a number of special extensions and adaptations of the model, each designed
to test its potency in meeting particular school needs. Some of these
adaptations would be applicable in almost any school while others may be
of value in only a limited number of environments.
At Fessenden Public School in Ancaster the teachers considered their prime need to be opportunities to meet together for curriculum development. We assisted them in developing and adapting a volunteer plan designed to give the teachers two hours per week for regular curriculum development. We had no difficulty in recruiting far more people than were required to provide for the supervision of classrooms that would be essential for this program to operate. Most of the concerns that we all had initially proved to be groundless. Parents working alone or in twos or threes quickly became effective classroom supervisors. Discipline problems that were anticipated simply did not materialize in most classrooms. Teachers quickly learned to reorganize their own time and to help pupils define tasks that they could work on during the periods of parent supervision. By the midpoint of the initial year the staff had successfully implemented its program so that they could engage on a regular basis during school time in curriculum development. No loss in students' growth patterns came to light in the evaluation of the program.

The staff of St. Daniel's Separate School in Hamilton showed concern about the needs for identifying and meeting the needs of a larger number of youngsters with special education problems and at the same time for integrating these students into the regular program of the school. This school already had a successful comprehensive volunteer program. We found that it was relatively easy to alter this program to meet the needs in special education defined by the staff. The principal and the special education teacher were in charge of the broad design of the program. Volunteers assisted in a number of ways in relieving teachers for time to prepare pupil profiles, and to provide the special education program with the drill, review and other forms of consolidation that actually represented the major part of the teacher's work with the special education students. In the process of developing this program teachers identified almost three times as many youngsters requiring special education programs as in the previous year. The arrangements for special education on the part of these youngsters were so well integrated into the school program that many of the parents were quite unaware of the existence of such programs within the school. In particular the stigma attached to special education seemed almost completely to disappear.
The most radical adaptation of our general model was applied in Victoria Public School, an inner city school in St. Catharines. Bearing in mind the changes in individual attention and in the allocation of teachers' time to various levels of functions described earlier, we wished to explore the outer extremes of this tendency. In order to explore this question we recruited and assigned twenty-five volunteers to work with one teacher in a regular grade 1 classroom. These parents worked one half day per week, so in effect we added $\frac{1}{2}$ adults to the classroom at any point in time; in other words the adult manpower in the classroom was increased from 1 to $3\frac{1}{2}$ persons. The program was carefully monitored with control classes and pre-and post-test results for the more important stated objectives of the school. In addition to adding the manpower to the classroom we deliberately assisted the teacher in identifying the important functions in the classroom and of learning to reorganize her time so that she was working most of the time at those functions which related most strongly to pupil growth. The teacher tried out various strategies for the reorganization of the classroom and found that the most effective way of communicating to the volunteers and at the same time ensuring that students were working at their level of readiness was to have an individual pupil progress book in which she wrote assignments each day that volunteers were to carry out with the individual students and in which the volunteer would record statements of the individual's progress. Toward the end of the year an observation of the allocation of the teacher's time indicated that she was spending approximately 80 per cent of her time on three main functions, organizing the continuum for learning, determining the student readiness for the next phase in the continuum and initiating the new concepts that the pupils were to learn. Practically all other activities of the classroom were gradually taken over by the volunteers. These included adding content to the existing mental structures, review, drill, listening to students read, marking and supervising arithmetic, helping children with arithmetic problems, passing out and collecting materials, running off seatwork material, etc. The observer team found that the volunteers themselves were engaged over 77 per cent of their time in tasks that clearly were instructional, a surprising outcome in the light of my own and Hillsum's findings on teachers' limited time allocations to instruction. The amount of one-to-one attention that each pupil derived from this program was in-
creased many times over the usual situation; at times the increase in individual attention was greater than ten-fold.

It is perhaps not surprising to learn, then, of remarkable increases in student growth in such a program. The evaluation of student growth in this adaptation is documented in our report entitled Using Volunteers in Schools. The graphs show that the youngsters made dramatic gains over the control classes in all of the measured objectives, with the greatest gains made by children in the middle of the class. The average gain of the class in reading comprehension was 2.0 years with somewhat lesser gains in other important subject areas. An independent study was made of the patterns of growth that could be attributed to the culture and it was found that the pupils grew only .6 years in those elements that were attributable to the culture at large. One would be hard pressed to find another classroom in Ontario that has documented the kind of growth gains established in this program. Considering the saturation of volunteers in this classroom and the amount of external leadership given one has to ponder whether such a radical adaptation could be implemented in many or most classrooms. However, a modification of this program, with a reduced number of volunteers in the classroom and with some broad attention to in-service developments of teachers which relate to reorganization of teacher time should be possible in a large number of schools. Another major outcome of such an adaptation may be radically altered expectations or perceptions of the rate of student growth when enriched instructional patterns are provided. Incidentally, the pupils in this classroom not only grew more rapidly in stated school objectives, but received instruction in additional curriculum components, including a number of the strands in our centre's primary thinking program.

Another of the adaptations that we have explored involved the possible use of a corps of parent volunteers working with the entire primary division of a school in order to enable the staff to regroup all pupils at the primary level in the language arts program in keeping with the readiness level of the student. Obviously such a plan calls for additional time for teachers to be able to work together on program planning, regrouping and frequent evaluation. Also needed are large blocks of additional adult time to help individual students with the language arts program, and in particular
with oral reading. Our attempt to apply this adaptation in a primary school has met with something less than complete success. We were able to recruit a large number of parent volunteers, but the staff has shown an inclination to use their services for a wide range of general supportive assistance rather than allocate the additional adult time to their original commitment of integrating and individualizing the language arts program. We interpret this weakness in the study as evidence of a fairly low commitment toward the goals of the project and not as evidence that the volunteer program is incapable of meeting this special adaptation. It is our intention to try this adaptation again, this time with the staff of a junior school who have already identified the need for integration of the language arts program. We believe that the volunteer program has the capability of providing the two additional resources needed for the successful integration of the language arts program in either a primary or a junior division.

In Ontario schools there have been relatively few attempts at formal approaches to differentiated staffing. We contend that a plan for differentiated staffing should include one level for volunteer work. We have been working closely with the staff of a secondary school which has broken the traditional line-and-staff organization and has eliminated the position of department heads in subject areas in favour of three deans who work with the principal in administrative leadership and are supported by the team of teachers, a group of paraprofessionals, and a broad corps of volunteers. Our interest in this model is to develop a system for describing the range of functions performed by each of the levels and to determine the proportions of time spent in each function by each group.

In order to deal with some of the legal, administrative and political aspects of bringing in a major innovation such as a comprehensive volunteer program we are working with six principals in one county in a plan which we entitle a League of Innovative Principals. We have found that by sharing ideas and responsibilities the principals themselves feel more secure about establishing volunteer programs. Incidentally, because they are working as a team they have been able to obtain larger proportions of the time of program consultants and administrative officials. Similar leagues would be useful support systems for other kinds of school innovations.
Innovative practices usually attract large numbers of visitors. A recent change in Ontario regulations provides every teacher with up to twelve days for professional development and we foresee the likelihood that some of our more prominent volunteer programs will be swamped with visitors in the year or two ahead. In order to provide lighthouse situations which will influence the rest of the staff in the particular school and in the jurisdiction, as well as provide opportunities for visiting teachers, we are helping one school system to establish thirty lighthouse classrooms for volunteer work. These thirty classrooms will all be in one county, and each classroom will have at least ten volunteers, each working one-half day per week. In other words in each classroom we will in effect have doubled the adult manpower. Incidentally, in the jurisdiction in question, Halton, a suburban county between Hamilton and Toronto, a large-scale approach to volunteer programs has been conducted in the past year with the result that the county now has over 1,600 parent volunteers working on a regular basis one-half day per week. This part of the volunteer program alone thus adds the equivalent of 160 full-time workers to the school staff in the county.

Most of our own studies of volunteer assistance have started with parent volunteers for the reason given earlier, namely the evidence in the Plowden Research Study indicating the correlation between parental attitudes and student achievement. However, any system which wishes to explore fully the role of volunteers in its schools must identify many other pools of talent including students at high schools and universities, elderly people, people in the professions, arts and business, and others. In one of our projects in the past year we have begun to explore the possible use of secondary school students as volunteers in nearby elementary schools. This project involves three different plans. In one of them the high school students identify the kinds of services they would be willing to volunteer to the local elementary schools, and the teachers in the elementary schools apply for these services. In another school, requests from local elementary schools are posted and students in the secondary school apply to meet the needs identified in the elementary school. In each of these two programs about 100 students from the secondary school in question assist in 8 or 10 nearby elementary schools. In most cases it is required that the student negotiate with his teachers for the volunteered time. It is suggested that
the student endear to find relationships between his volunteering and units of study in one or more of his secondary school subjects. The third plan for using secondary school students as volunteers takes place on an exchange between a secondary school and a bilingual elementary school. One of the difficulties of providing high school Oral French programs that will meet the needs of bilingualism espoused by our society is the failure of the culture to provide reinforcement for the Oral French program. In order to meet this need and at the same time to provide additional resources for the teachers and students in the bilingual elementary school, approximately 50 secondary school students of Oral French were recruited to work as volunteers in the primary grades of the bilingual school. At the present time the secondary school students are communicating in French over 80 per cent of the time that they are in the elementary school. We intend to evaluate the three student volunteer programs in terms of the advantages to all three parties concerned, the secondary school student, the elementary school teacher, and the elementary students. On the basis of studies done elsewhere it is reasonable to suggest that the greatest gains, particularly in the affective area, will be made by the volunteering students.

Our experiences with a wide range of volunteers in schools lead us to identify three somewhat different forms of volunteer help. Secondary school students and parent volunteers, particularly in the primary grades, are commonly referred to as regulars because they provide their services on a structured basis, usually one-half day per week. In general they work with the same teacher or teachers and perform a similar spectrum of classroom tasks. A second corps of volunteers and the one which historically is oldest in use, is what we call the on-call corps -- persons in the community, usually parents, who assist the school with specific short-term needs, either of a supportive or an instructional nature. The third pool of volunteers, one which is used most widely in secondary schools, is what is termed the Talent Bureau -- a corps of parents and professional and business persons whose experience, background, ethnic origin, business, artistic or professional experience, or some other feature enables them to provide the school with a valuable resource. Generally the school maintains a file of these persons, who are then called on periodically for specific assistance related to the particular interest and competency of the volunteer. A number of secondary
schools include several hundred persons on the Talent Bureau.

Without wishing to deny the very significant contributions made by the on-call corps and talent bureau corps, or to deny the significant potential contribution to be made by a wide range of volunteers, our evidence suggests that the potential advantages of parents who serve on a regular basis in the school, indicate they should receive prime attention in any plan for a volunteer program in the school.

The title "Help or Hindrance?" causes me to return once again to some of the problems revealed in volunteer programs. By far the greatest amount of difficulty with volunteer programs is clearly the result of the lack of a comprehensive plan developed or implemented by the school staff, and in particular a plan which puts teacher readiness well ahead of recruitment in both time and priority.

In the long run probably the most serious problem in volunteer programs has to do with a particular aspect of parent and teacher behavior; our observations indicate that volunteers are even more inclined than teachers to give students ready answers to questions instead of causing the students themselves to discover these answers; in the process they deny the very autonomy and independence in learning that should be a major objective of instruction. For this reason, and for reasons of confidentiality, attendance, teacher security, etc. it seems reasonable to propose that one or two short instructional sessions with volunteers who work on a regular basis should be provided.

Volunteer programs will probably continue to appear to be a hindrance to some teachers, and particularly to those who cannot resolve problems of insecurity or of lack of organizational training and ability. There is no doubt that in the initial stages volunteer programs actually cause teachers more rather than less work, because a teacher has to add the organization of the volunteer's activities to his or her own planning. Unless the teacher is able to learn ways of reorganizing adult time in the classroom, the teacher is unlikely to continue to use volunteers. The continuing use of volunteers by almost all teachers in our studies probably indicates that the teachers who have made use of this resource, were already more secure and flexible, and better organized than most of their non-participating colleagues.
We believe that in order to capitalize on the potential long-range values we must consider three special features of a plan for a comprehensive model for volunteer programs in schools which ordinarily would not be thought of by the school staff, or might seem even to run counter to a principal's initial perception of a volunteer program. First of all, we contend that recruitment should be as open as possible in order that we can maximize the potential for enhancing the attitudes of as broad a range of the parent population as possible. We believe that selective recruitment policies which tend to bring into the school only those parents who already have positive attitudes toward the school or who are already perceived as being loyal friends of the school, will fail to capitalize on the potential that we visualize in volunteer programs. Secondly, having argued for open recruitment we would recommend that all those who volunteer be assigned initially to a broad spectrum of relatively low level jobs in the classroom. Then, as their abilities and reliability are demonstrated, they should be deliberately promoted to more challenging tasks in the classroom, and to tasks which bring them in closer contact with individual students. The basic training is provided as needed by the teacher, so that in due time in the classroom it is observed that both the volunteer and the teacher are performing and sharing a wide range of classroom functions. We believe that the restricting of volunteers to a narrow range of low-level supportive tasks runs counter to the best interests of a volunteer program. Similarly, any formal decision not to permit volunteers to engage in instructional functions merely sets up a theoretical dichotomy that cannot be applied in practice, and if it could, would deny both the volunteer and the pupil the greatest benefits of the program. Thirdly, unless the volunteer program itself capitalizes on the motivations of volunteers one could not expect it to succeed or to have any permanent structure. Our studies of the motivations of volunteers indicate that there is an important difference between their initial motivations and those that emerge after two or three months in the program. Initially, much of the motivation for being a volunteer in a school has to do with curiosity about school programs, and particularly curiosity about the progress of the volunteer's own youngsters in the school; with other volunteers the motivation seems to be little more than faith in the
statement of the school that volunteer help is required. A few months later however a similar survey of volunteers' attitudes reveals motivations and rewards that relate more closely to feelings of worth, satisfaction, and accomplishment, a sense of making a worthwhile contribution, pleasure in opportunities to work with adults, insights into instructional practices, pride in seeing evidence of student growth influenced by their work, etc. Unless the program permits these types of motivation to be developed, volunteers are not likely to stay. Whimsically we suggest an ideal model for quietly getting rid of a volunteer program should this ever be necessary; all the principal would need to do is to reallocate the volunteers to playground duty and lunchroom supervision. The notion that volunteers should be recruited merely to do the jobs that teachers do not wish to do fails to recognize the motivations and resources of volunteers. The long-term success of the program depends on the principal's ability to dovetail classroom needs with the motivations of volunteers.

As suggested earlier the greatest obstacles to the development and maintenance of comprehensive volunteer programs in schools have to do with the security of principals and teachers. However, teachers are aware of the need to spend more time on professional functions in the classroom and to spend more time with individual students. Unless we develop plans and strategies for reducing the obstacle of the insecurity of teachers and thereby making it possible for teachers to accept other adults who will share in their activities, the opportunity to improve the quality of the classroom experience for our youngsters will be denied. Fortunately in Ontario new regulations from the Ministry and a new policy statement from the Ontario Teachers' Federation have helped to reduce the insecurity at official levels. Everything possible should be done at the jurisdictional and local school level to extend these intentions into the life of the school and the classroom. In conclusion, considering the evidence provided concerning the improvement of student growth in the short range and the possibility of improved student achievement in the long run as a result of improved parental attitudes; the evidence of the natural transfer of teacher time to higher level professional tasks and the possibility that, with deliberate attention, much greater efforts in this direction could be made;
and at the same time recognizing the fact that there is a vast pool of uptapped talent that might not only make a contribution to the school but might at the same time develop more positive attitudes in the community towards the school and improved insights and competencies on the part of parents and other adults, we are prepared to contend that no school and certainly no school system can continue to ignore the potential in volunteer programs.