This document presents the educational goals of the Vancouver School Board and describes an educational program and the broad space use specifications for the construction of several proposed facilities. The key elements in the proposed facilities are (1) a school designed to accommodate 495 students in the equivalent of 14 classroom spaces; (2) a gymnasium of the size required for elementary school physical education facilities; (3) a joint school board-public library board resource center; and (4) a school that provides appropriate areas for administration, lunching, medical requirements, art, music, various office spaces, and storage spaces. (Author)
THE EDUCATIONAL SPECIFICATIONS
FOR EDUCATIONAL FACILITIES IN THE
BRITANNIA COMMUNITY SERVICES CENTRE

These include:

* An elementary school
* An addition to the second school
* A joint School Board-Public Library Board Library Resources Centre

by

D. A. MOIR
Assistant Head, Educational Planning
Department of Planning & Evaluation
Board of School Trustees of School District
No. 39 (Vancouver, B.C.)
PROPOSED EDUCATIONAL SPECIFICATIONS FOR AN ELEMENTARY SCHOOL
AND AN ADDITION TO BRITANNIA SECONDARY SCHOOL
TO BE BUILT IN CONJUNCTION WITH
THE BRITANNIA COMMUNITY SERVICES CENTRE

Key elements in this proposed school will be:

* A school designed to accommodate 495 students in the equivalent of 14 classroom spaces.

* A gymnasium of the size required for elementary school physical education facilities.

* A joint School Board-Public Library Board library resource centre developed in close relationship to the school.

* A school which provides appropriate areas for administration, lunching, medical requirements, art, music, various office spaces, and storage spaces.

***
PLANNING ADVISORY COMMITTEES

The following people served in a consultative capacity as members of various planning advisory committees:

Library Resource Centre

From the school system:

Miss J. G. Curley, Mr. J. Fraser, Mrs. M. J. Ginther, Miss V. A. Razovich, Miss M. I. Varga.

From the Public Library:

Mr. M. P. Jordan, Mrs. J. Kanje, Miss J. Matheson, Mr. P. E. O'Neill, Mrs. M. Vatcher.

Elementary Education

Teachers from the Grandview-Woodland area:

Miss F. L. Chan, Mrs. M. H. Dean, Miss E. A. Devlin, Mr. M. H. Gosse, Mrs. P. M. Hepburn, Mr. R. J. E. McKeown, Mr. W. H. McLaren.

Teachers from key elementary class situations:

Mr. K. E. Brooks, Miss A. J. Craig, Mr. W. F. Dronsfield, Mrs. M. A. Fisher, Mr. K. H. Janzen, Mrs. A. J. Kharadly, Miss R. E. McQueen, Mrs. R. K. Showers, Miss E. L. Stark, Mr. H. Voth.

Vancouver School Board consultative staff:

Art: Mr. A. J. Colton
Audio-Visual Education: Mr. G. K. Kilpatrick, Mr. C. C. Gosbee
Intermediate Grades: Mrs. C. Dewar, Mr. R. G. Louttit, Miss M. Naish
Music: Mr. D. Tupman, Mr. A. McLeod
Primary Grades and Kindergarten: Mrs. E. C. Taylor, Mrs. M. C. Douglas, Mrs. M. D. MacNeil, Miss P. M. Proctor, Mrs. A. K. Roberts

Secondary Education

Secondary Schools

Principal, Department Heads and Staff Committee at Britannia Secondary School.
To provide maximum opportunity for each youngster to develop his ability to live in this changing world in a way that will give him personal satisfaction, and at the same time contribute to the positive growth of society. Implicit in this statement of purpose are the following general goals with respect to the child as an individual.

We are committed:

(1) To emphasize the personal worth of each student and to help him develop a positive self concept.

(2) To help each student develop competency in the basic and diverse skills essential to living in this world, particularly the skills to communicate, to use numbers, to think, and to make decisions.

Educational Goals for the 70's

The Vancouver School Board in stating its general goals for education in this city also approved a framework or organization which is designed to permit achievement of the goals as stated. This framework includes:

(1) Matching the right students with the right teachers in flexible groupings.

(2) Developing a curriculum that is closely related to real life experience and which allows for the continuous ungraded development of each student. This requires providing learning options including learning in locations outside the school building as well as inside the school building.

(3) Identifying as early as possible students who need special assistance and providing it, as far as possible, through the Learning Assistance Centre in the school.
(4) Bringing together in a cooperative way those who have a responsibility for the learning experiences of students with those resource persons who can contribute to the fulfillment of these experiences.

(5) Encouraging teachers to use professional freedom as laid down in School Board policy.

(6) Providing supportive services, consultative assistance and staff development programs that will help in the achievement of these goals.

(7) Evaluating on a continuous basis what is being done in schools in terms of these goals, considering both the cognitive and the affective development of the students.

(8) Providing for community involvement in schools through the association of teachers, principals and students with parents and other interested citizens.

The Concept of the Community-School Approach

The Board is committed to the philosophy which supports the idea that the community become more involved in the affairs of the school. It believes that as education costs are rising continuously, citizens have every right to ask questions about what is going on in our schools. The Board believes that its citizens can influence the school and in turn be influenced by it. As the children we are educating today will be tomorrow's citizens, the community has a direct educational and financial stake in them. To monitor the attitudes of the public towards various aspects of schooling, the Board has advocated the establishment of Community-School Committees.

The Vancouver School Board is also committed to the community use of school facilities. Increasing demands are being made by the public for
them to have greater use of certain school facilities at times when the buildings are not being used for school purposes. In designing this school, consideration must be given to planning for joint school-community use.

The Britannia Community Services Centre Concept

The Halsey report of 1967 proposed that community services centres be built in every neighbourhood using schools as their focal points. Such centres would be built to serve the citizens of a particular area and to provide them with recreational, educational and service facilities that could be grouped together in an area adjacent to a particular community. The Vancouver School Board, together with the City of Vancouver, the Civic Development Department, the Social Planning Department, and the Vancouver Parks Board, approved in principle the establishment of a community services centre to serve the areas of Grandview, Woodland and Strathcona, and agreement was reached to develop this centre around the Britannia Secondary School as a focal point.

The underlying philosophy is that the various agencies so represented in this total complex would contribute capital funds to the development of structures which would house the various agencies that would become involved. Under this agreement, the Vancouver School Board would:

(a) contribute to the capital cost of constructing an elementary school, an addition to a secondary school, a gymnasium, a joint Public Library Board-School Board Library Resource Centre, and the development of playing fields.

(b) The Vancouver Parks Board, the Vancouver City Council, and the Public Library Board, would contribute funds for the construction of other facilities which would serve the citizens of this community
in terms of recreation and social development. This would include office space, swimming pool, ice rink, drop-in centre, teen and adult lounges, and a cafeteria.

(c) The Federal Government would contribute capital funds under Urban Renewal for land acquisition.

This philosophy embodies the concepts of:

(a) joint use of space;
(b) joint use of facilities and equipment;
(c) joint use of personnel;
(d) cost sharing.

K-Grade 12 Concept

The Education Department of the Vancouver School Board recognizes the desirability of viewing education from the time a child enters school until he leaves the public school system. This means that:

(1) Curriculum is no longer viewed in segments or in educational compartments such as elementary education or secondary education. Instead, it involves a total view of the curriculum and the learning experiences from kindergarten to twelfth grade.

(2) Desirably, there is an integration of elementary and secondary school programming, school facilities, and school staff. As Britannia Elementary School is being built adjacent to Britannia Secondary School, it is considered to be an integral part of the total Britannia Community Services Centre. Under this arrangement, tremendous opportunities exist for:

(1) Complete planning of educational programs from kindergarten to twelfth grade in the various disciplines.
(2) Integration of staff in various discipline areas, particularly physical education, art, and music.

(3) Joint use of school space by both elementary and secondary school pupils and teachers.

(4) Use of secondary school student personnel as volunteer aides to supplement the elementary school need for volunteer aides and teaching assistants.

Schools to Serve Clients

It is believed that the schools mirror our educational concepts. One of the basic underlying concepts in planning for this elementary school is that programs should meet the needs of the various client groups represented therein. The Grandview-Woodland area is characterized by numerous national ethnic groups, each with its own peculiar set of characteristics, each requiring specialized educational programs. Among the more numerous groups represented in this area are the following: Italians, Chinese, and North American Indians, comprising roughly 60% to 75% of the total population. Other nationalities (between twenty and thirty national groups) are represented in smaller numbers.

Within each ethnic group, a segment of the student population reflects some or all of the following characteristics:

(a) students from single parent families who suffer from the loss of one parent’s influence;

(b) students from transient families who have in many cases experienced failure situations in numerous schools;

(c) children with multiple learning disabilities;
(d) children who display certain physical defects, or who have not had normal physical development programs, either in the home or in early schooling.

Some Characteristics of National Groups in this Area and Their Educational Needs

1) **Italian**

Many of these children lack basic readiness for language and number skills. Though active, they are poorly coordinated as a group and require gross motor training. English is spoken as a second language at school and is infrequently used in the home. Language training and readiness experiences are required by most children of Italian descent.

2) **Chinese**

These youngsters are usually reticent in becoming socially active in the school setting. Chinese children need encouragement to participate actively in school activities. Like Italians, they require readiness experiences, English language development, and gross motor training.

3) **North American Indian**

This group displays similar characteristics to Groups 1 and 2 by reason of their minimal language background and preschool experience. These children in many cases have come directly from reservations and have extreme difficulties in adjusting to most aspects of our society.

4) **Other National Groups**

Children from the many national groups represented in this area require basic training in English language development as well as readiness training for reading and number skills. Children from single parent families need assistance with the many emotional problems that seem to arise out of
many of these home situations. In school, children from single parent families seem to require certain adult support from the missing adult member of the home. Transient families, children with learning disabilities, and physically deprived children, are found in all national groups. Many children in this area are deficient in (a) language development, (b) desirable preschool experiences, (c) adequate dental health training, (d) normal physical development. There are many children who have experienced repeated failure in school programs.

Program Needs of Children and Parents from the Grandview-Woodland-Strathcona Area

because of the varied preschool experiences or the lack of preschool experiences of many children in this area, a pre-kindergarten training program of readiness activities is envisaged to bring them to a readiness-for-learning level comparable to other children whose preschool experiences have been many and varied. Parent education programs for mothers with preschool children should parallel programs for children. Such programs should be aimed at assisting young parents and thus encouraging them to develop understandings of and skills in:

(a) improved child care techniques;
(b) English language development;
(c) knowledge of child growth and development;
(d) desirable readiness experiences for children up to age five.

The main objective would be to have these people view the education process as a continuum, and to emphasize the importance of parents' involvement in this enterprise.
School Programs for Elementary Children

It is desirable that the emphasis should be placed on an "activity approach" to learning. Children can then be provided with a varied choice of carefully planned indoor and outdoor learning activities. Activity Learning or Open Education embraces these broad program goals or objectives:

1. To recognize and provide for individual differences through an instructional program based upon individuals' needs and interests.

2. To provide guidance and opportunities for continued social growth and adjustment.

3. To encourage educational growth through independent thought, action, creative ability and critical thinking.

4. To foster an appreciation of the surrounding physical and cultural world.

5. To provide instruction and guidance necessary for the refinement and enrichment of basic skills and knowledge.

6. To maintain an environment which will encourage and direct students towards self discipline and self regulation.

7. To integrate and interrelate various subject matter areas, one with another, for meaningful learning purposes.

8. To interpret and implement the educational needs of society, to meet the demands of an ever changing world, to guarantee close and personal student-teacher relationships as an aid to the development of personal student identification, of self confidence and self understanding.
Characteristics of the School Program

(1) It will emphasize continuous development of the student from the time he enters school until he leaves school at the completion of twelfth grade - the K-12 concept.

(2) It will emphasize in the elementary school the affective side of a child's development, favour human values, attitudes and feelings, and the cognitive side which emphasizes the development of specific program skills and knowledge.

(3) It will make provision for numerous opportunities whereby a child is able to function in ways that will characterize the way he will function when he enters and becomes involved in the real world. This means that the curriculum will be related to his real world, that it will capitalize on his interests, and that it will emphasize the development of a child who has an understanding of and appreciation for the feelings and rights of others as he participates in social interaction situations.

(4) It will be characterized by many and varied experiences for the child as he moves from individual activities through varying types of group activities.

(5) It will emphasize discovery learning and will provide opportunities for a child to be involved in making decisions regarding his schooling.

(6) It will provide a rich and varied environment whereby a child will have numerous choices of activities, of materials, and of colleagues with whom he will work and interact.
(7) It will give a child a choice in selecting the type of learning style most suited to him. By having this choice of learning style, as well as a choice of learning activity, he will therefore be held more responsible for making certain key decisions involving his learning.

(8) It will provide a wide variety of opportunities for all kinds of group interaction.

Concepts of Organization and Administration

Activity Centred Learning or Open Education embodies the concept of flexibility in organization and scheduling. Orientation of building spaces is particularly important since the flexible schedule will result in irregular time patterns of class changes. At any given time any part of the student body may change spaces. Care must be taken to minimize distractions to students involved in learning activities while others are moving about.

Students in this kindergarten to Grade 7 school will be grouped in families. Each family will be comprised of children of several ages. The family will be a multi-age, multi-grade group of children. To ensure maximum flexibility in grouping of pupils for learning activities, it is essential that the family groupings overlap each other. This concept of "shingled grouping" should be reflected in the building design.

This school will be organized on the basis of four family groups. Each group, comprised of three teachers and their children, will be housed in a "core area." "Shingled cores" will facilitate and in fact encourage flexible grouping arrangements of students and staff. Similarly this type of organization will provide for all the benefits of cooperative teaching.
Shingled Learning Cores

Each core provides opportunity for varied pupil groupings. The building and the furniture should encourage and assist in providing desirable spaces for these groupings and the learning activities associated with them. Provision must be made in each core to provide isolated space if and when required. Some kindergarten children may require this type of space for a portion of the time.

Supporting these core areas will be the specialized spaces that are required for art, music, drama, physical education, health, lunching, conferenceing, administration, library, audio-visual, learning assistance, New Canadian, motor-training, and teacher preparation. All of these areas should be reasonably adjacent to the core areas and at the same time readily accessible from each core.

Traffic Patterns and Relationships

Each core area should be located in relation to the other core areas to facilitate free traffic flow and to minimize interference. Free
flow among the instructional areas is vital, as well as flow to and from the resource centre, the administrative area, and any auxiliary services areas such as gymnasium, art facilities, science facilities, music facilities. Traffic to and from the school would consist mainly of pupils, teachers and other personnel arriving at the site and moving from the site in automobiles, on foot, and in some cases on bicycles. Such movement will be for the purpose of (a) bringing people to and taking them from the school, (b) delivering supplies and equipment to the school, and (c) removal of school waste. In cases of movement of large groups of youngsters from the school, buses will be required, and traffic patterns should be designed to minimize interference of automobile and bus traffic with pedestrians. It is desirable that there be a loading and unloading zone for buses and automobiles, that there be bicycle storage spaces in inconspicuous and reasonably secure places, that there be approach sidewalks to and from the complex. Care must be taken in designing traffic lanes to separate the movement of students from the movement of resources required by the administration, the materials centre, the custodian, the art department and the physical education department. Parking, reasonably adjacent to the site, should be available to take care of the needs on special occasions which attract large numbers of people to the school setting for dramatic or musical productions. In addition, a parking area should be provided reasonably adjacent to the building for adults who will be working in the building during the school day. This includes, as well as the school staff, other adults who may be attending adult programs in parts of the school building.

**Storage**

When an Activity Learning Approach is used in an open area, storage
sometimes presents a critical problem. Many and varied storage areas are required for the use of general school supplies, for housing specialized supplies for art, music, physical education, for storing finished products that are produced by students, for housing various types of equipment that are available within the plant. Storage should be so designed to serve multiple functions, namely: inside storage space, secure storage space, open storage space, counter space, tackboard space. Many storage areas should be designed for their flexibility, not their permanence. Storage is also required for custodial and maintenance supplies. Standard requirements in this area should be strategically located to serve the needs of the custodial staff.

Space Requirements

CHILDREN in this school will require TIME and SPACE to be engaged in activities:

* where they will function as individuals;
* where they will have opportunities to interact with other individuals or small groups of individuals;
* where they will have opportunities to interact with large groups of individuals.

TEACHERS require SPACE:

* where they will have opportunities to interact with, to discuss with, and to listen to: - individual children,
  - small groups of children,
  - large groups of children;
* where they can work as individuals to:
  - prepare material,
  - develop programs,
  - prepare units of work;
* where they can work with other adults.
SPACE is required for:

* quiet intimate kinds of activities;
* noisy activities such as drama, free play, music;
* wet or messy activities;
* dry, quiet or semi-quiet activities.

It is essential that the various kinds of spaces be isolatable when required, yet at the same time the concept of their accessibility must be retained. This means that provision must be made within the core areas for wet as well as dry activities, for noisier activities requiring movement, and for activities that require a degree of isolation. Flexibility rather than permanence should predominate our thinking. Single storey space is more desirable than multi-storey space, as it provides immediate easy access to the numerous outside areas which are an integral part of the learning environment. As the approach in this school hinges on the concept of Activity Learning, more opportunities must be provided for developing learning centres throughout each core. This means that provision should be made for more corner areas within each core than is provided by a rectangular classroom. Some of these spaces will be provided by flexible arrangements of furniture. Other corner spaces should be provided by exterior walls. With this in mind, it is strongly recommended that consideration be given to a hexagonal or octagonal design of exterior wall arrangements.

Specific Space Requirements and their Interrelationship

1) The General Administration Area

The function of administration is to direct, to coordinate, to motivate, and to facilitate, all activities within the school. The administration area should be central to all areas; it should provide easy access
to and from other areas of the school; it should be so arranged to encourage communication between personnel in terms of staff and auxiliary personnel. It is desirable that this area be inviting and comfortable, so as to create an atmosphere of warm friendliness. The waiting area should be immediately adjacent to the general office, within easy access of the principal's office, and strategically located in terms of main entrances to the building.

2) **Central Office Area**

   This area will house the stenographic staff, record storage, general office equipment, work space for office activities, and storage space for office materials. It should be located centrally and be adjacent to the teaching cores, and the main entrance to the building. Within this area, there should be space for office equipment and work space for office machines that is preferably adjacent to the central office area rather than being a part of it. The entire central office complex should desirably be an open area without separation partitions. An appearance of physical separation might be accomplished through suitable furniture arrangements, planters, etc. To provide a desirable noise level, the area should be carpeted.

3) **Principal's Office**

   This office should be located next to the central office area. It should be accessible to the public, to the students and to teachers, without placing it in a heavy traffic area. It should be large enough to accommodate a large desk and chair, minimum filing cabinets, three or four comfortable chairs, and adjustable book shelving. As many conferences of a confidential nature will be held here, consideration must be given to acoustical treatment. There should be a warm, friendly, and yet professional atmosphere. The reception area and the location of the secretary in the general office space should be adjacent to the principal's office.
4) Conference Area

This space should also be located close to the principal's office and should be large enough to accommodate up to fifteen people in a conference situation. A possible solution for this requirement might be provided by careful planning of a combined staff room, teacher lunch room, teacher conference-preparation room area.

5) Staff Room, Lunch Room, Conference Room, Preparation Room Area

In lieu of separate areas for each of these functions, a special centrally located area might be designed to provide space for conferences, for a teacher relaxation area, for a teacher lunching area, and for teacher preparation and work areas, all in one general complex. This area, if strategically planned and located, would eliminate the necessity of a teacher preparation area in each core. This area should be suitably treated acoustically, warm, friendly, and equipped with the kinds of furniture that invite relaxation and friendliness. It should provide the kinds of furniture that are required for preparation of materials, and storage of teacher materials. It should have sufficient flexibility to enable staff to open it into a large area if required, or into isolated smaller areas. By design it should be possible to house several different kinds of activities, all going on at the same time, without undue interference. For example, some staff members will be relaxing over coffee while a small conference is taking place between a teacher and a group of parents, or while individual teachers are working on the preparation of programs and teacher materials. This room should provide storage space for certain kinds of teacher materials that are required in preparation of units of work, etc. It should be adjacent to and accessible
from the central office. This will ensure ease of communication between the two areas. For example, the staff mail boxes should be located in such a way that they are accessible from this area as well as from the general office area.

6) Washroom and Toilet Facilities

Washroom and toilet facilities should be located in the general area of the administrative wing, accessible with reasonable ease from the various components of the area. Adequate washroom and toilet facilities should be available in the vicinity of the core areas and the gymnasium.

7) Medical Room

Space is required for normal medical room facilities.

8) Library Resource Centre

As the library is the heart and core of an effective educational institution, it should be located in such a way that it can provide desirable library and related services and materials to students and to all school personnel, at any given time. Specific recommendations for library specifications will be included in a separate package, as the Library Resource Centre area for this complex is a specialized joint Public Library Board/School Board project.

9) Wet Areas

Some provision should be made for small wet areas within each core unit. Such areas are not to be mistaken with the large centralized wet area used for art and science activities, which is located elsewhere in the school.
10) **Noisy Areas**

Facilities should be made for noisy activities that can be isolated with reasonable sound barriers for music, and for drama activities. Music and drama require flexible space, flexible furniture and good acoustics. Consideration should be given to the possibility of a tiered carpeted area that can be used for music, drama, or as large meeting space. A tiered space suitably carpeted may better serve the purposes of viewing and participating activities as required by music and drama.

11) **Art-Science Area**

An art-science area is required for activities involving movement, participation, construction, water play, play area, painting, woodworking, indoor planting, and building. It provides, in addition to activity spaces, spaces where models can remain during the building process and where scrap materials can be stored. This particular area requires some provision for isolation because of the kinds of activities that will be taking place there. Noisy kinds of activity should be removed from quieter activities such as reading, mathematics, and study. As this area is an area likely to be used extensively by the community after school hours, special consideration should be given to:

1. Increasing the size of the area to provide a double size art-science space, if community funding is available for this purpose.
2. Separating school and community space by designing a large double storage facility for materials and equipment, one half of which can be isolated completely for school use, the other half isolated completely for community use. The total work space would be multi-use. During the day it would be used entirely by the school. During the evening, after school, this area could be used by community groups.
12) **Gymnasium-Auditorium-Lunchroom Complex**

This space should be designed to provide for all types of physical education and recreation activities and for motor training. By combining these spaces, one large flexible space is then available.

13) **Learning Assistance Centre**

(1) **Location**: Space should be positioned away from outside noises such as playgrounds and parking lots. Inside noises such as busy halls should also be avoided, since some of these children are highly distractible. The area should be fairly central for ease of movement.

(2) **Activities**: A variety of activities will take place in the centre and these will change frequently. An area for gross motor development using balance beams, small trampoline, benches, etc., should be separated from rest of room. Classroom furniture should be sturdy but movable. Group and individual programs will coincide.

(3) **People**: Approximately 12 to 15 children may be in the centre at any one time accompanied by five or more adults. There will be frequent movement to and from regular classrooms.

(4) **Space requirements**: Although the number of pupils involved is fewer than the regular class, the variety of activities carried out will require many materials and varied kinds of space. The room should be spacious so that an individual can work away from others. Quiet areas created by carrels, and floor to ceiling room dividers, are essential. Rugs in approximately two thirds of the room will reduce noise. A sink should be located in or near the classroom. Adequate storage space should be provided.

(5) **Additional space away from L.A.C.**: Certain activities could take place in halls, lunchroom or gymnasium.
Community Use

An underlying philosophy in the development and operation of this school will be that it is designed to permit joint use of space by both school and community. Certain school spaces will be made available to the community for various functions on a regular basis. Included in these spaces would be the auditorium-gymnasium, a jointly developed art complex, a jointly developed public library complex, and certain meeting spaces. In designing a building to permit this joint use, the following must be carefully considered:

1. Design of the building must be such that it facilitates ease of supervision.

2. Because parts of the school will not be open to the public when other parts are being used, the areas that are made available to the public should be isolatable from the remaining areas of the school, again to permit ease of supervision.
Educational priorities have established that the seven classrooms will provide space for intermediate science and social studies—humanities.

**General Science**

The equivalent space of three standard classrooms, plus storage and preparation areas, will provide space for intermediate science. As this is an integrated science program embodying physics, chemistry, biology, zoology, earth science and environmental education, the design of the complex should be such that sufficient flexibility exists in the structure to permit successful learning areas to be established for any of the branches of science which are included in the program.

As an alternative to completely open space, the attached design proposal shows a facility which allows for maximum flexibility exceeding twenty configurations of table arrangements. The design can be modified to provide openness without losing the laboratory atmosphere which science teachers feel is important. Modification of the design to incorporate and give the feeling of openness might be achieved by eliminating the rigid wall between the growing or project area and the teaching area, particularly to the counter level and upward. Sliding chalkboards or tackboards, or combination thereof, could be installed to the counter level. This approach would open up two or three rooms as required or close off the teaching area when the use of films or other project activities require a closed space.

(1) See Appendix I.
If the rooms are in a straight line configuration, one of the growing rooms might be designed to serve in addition to its growing facilities as a science resource centre.

It is desirable that within the centre complex there be easy access to certain science materials. Reference materials, film loops, film strips, transparencies, must be readily available to both students and staff members. Such materials would consist of those items permanently located here plus supplementary materials supplied from the library resource centre on a loan basis for a certain period of time. To ensure maximum flexibility, a combination of open storage and locked storage spaces must be provided.

As earth science is a vital part of the total intermediate science package, it is desirable that some growing facility be included. It is suggested that growing chambers would appear to be less expensive and much more versatile than a specialized, fixed growing area.

As flexibility of internal design is desirable, the concept of movable benches should be utilized insofar as possible. Perimeter benches would serve to free the central area, provided that they are equipped with compressed air outlets, gas, water and electricity. This type of perimeter arrangement would then free the central area which might be equipped with service islands. Appropriate furniture could be moved to and from the island bases. Using the attached diagram as a base, some configuration such as the following might be considered.

Assuming that the three classroom equivalent area is in rectangular shape, it might be possible to start with one end as a teaching space, followed by a resource centre space in the middle, and next to the resource centre space another teaching space, followed by a growing area space, followed by a third teaching space.
So far as possible, fixed wall space between these areas should be minimal, although provision should be made for closing each space off from the adjacent one, as has been suggested. A partial fixed wall, with the remaining portion movable in terms of upward-moving tackboard, chalkboard areas, would be a possible solution.

The science department considers this department as one which operates in a team situation. To create the most desirable type of scientific atmosphere for team function, it is desirable that the science rooms be located adjacent to one another. It is therefore recommended that the new intermediate science addition be located adjacent to the existing new science rooms in the east wing of the school. If this is not possible, the new rooms should be as close to the existing science rooms as feasible.

**Social studies-humanities**

The equivalent of four classroom areas will be designed to provide space for a humanities program. This space must be suitable for:

(a) large group presentations, where introductory material is presented;
    for lectures;

(b) for various types of media presentations where guest speakers speak to groups of varying size;

(c) for preparation of materials for seminars;

(d) for individual opportunities to explore and research a particular topic.
(e) for seminars where students will be provided with opportunities to meet in small groups for group discussions. Seminar topics will vary in conjunction with the major subject under study.

This type of program requires that the space be multi-use - flexible space, designed to permit development of small group study areas, small group seminar areas, at least one large group area, meeting rooms, rooms for individual study or spaces for individual study. As most of the programs offered here will require the use of resources that are contained in the Library Resource Centre, it is therefore recommended that this space be located near the library. It appears likely that in future a greater proportion of the library information will be of the non print variety, and therefore provision should be made to include within this total area spaces for individual or group media use. The media could conceivably be located in a library but should be available for use in spaces that are located either in the humanities area or in the library area immediately adjacent to the humanities area.

This space will be used for a variety of activities; therefore, it should be designed as an open area complex, with the additional facilities both in terms of furniture and movable partitions for the purpose of varying the space to suit the activity.

Educational Specifications for the Library Resource Centre

The library will be the heart of the educational program. It is vital to the encouragement of independent study and research. The library resource centre should be an area which is inviting to both students and the community. The interior should not only include those features necessary for circulation and collection but should also furnish spaces where research,
audio-visual appreciation, classroom activities and recreational reading are readily available for the group or for the individual. Because it is designed to serve the wishes and the needs of a school, of students, of school personnel, and of the community, all at the same time, care must be taken to ensure that the building design enables the participating groups to use the facility without conflict or undue interference.

The Central Purpose

The central purpose of this centre is to develop ways within its environment to assist and encourage young people to use the learning resources available to them. The centre will seek to accomplish this central purpose through:

1. a school-community oriented facility which is free of the traditional restrictions of established schools and libraries;
2. a community oriented program which involves the use of secondary school students and other persons from the neighbourhood in most aspects of its operation including volunteer aide assistance;
3. provision of multi-media resources selected to interest children and young people;
4. a multi-staff mix including service teams of librarians, teachers, other specialists and volunteer paraprofessionals;
5. involvement of parents in the learning process as well as children and young people;
6. activities designed to attract and stimulate young people to develop their interests rather than simply to be available for those with the initiative to seek out the centre;
inter-agency sponsorship by the school system and the Public Library Board, with the overall goal of fostering change in both library systems.

Objectives

The aims of this centre can be summarized in three broad objectives:

1. to expose children and young people to new stimuli related to their own identities and the prospects before them as individuals;
2. to motivate them to learn about these prospects as a means of self development;
3. to guide the students in the continued use of materials of learning, so that this use becomes an integral part of their life style.

To meet these aims, the centre will endeavour to provide, in addition to various kinds of space, materials and information in all media which serve these purposes. The centre will attempt to create a setting which is flexible and which will facilitate innovation. Ideas will constantly be sought from professionals, parents and even the young people themselves, and these ideas continuously evaluated in order to obtain feedback for program change.

The resources will be selected to stimulate learning, to support all the centre activities, to provide successful experiences in seeking information, and to relate to immediate interests growing out of personal concerns both in the neighbourhood and in family and school life. In time, resources will probably include as much non print as print materials.

The program will focus on learning activities for which resources will be provided, rather than on collections of materials which might be available in another institution. Personalities, happenings, drama, art, crafts, manipulative displays, games, films, and various other means will be used to
attract the disenchanted student and to introduce him to recorded knowledge. The centre will offer activities to individuals working with or without guidance, and to small groups working with a specialist such as a teacher, librarian, reading specialist, etc. Assistance and training in locating information will be provided for persons who are motivated to search but who lack the skills to use the resources. In the case of young children, parents as well as youngsters will be involved in the learning process.

The centre staff will encompass a variety of professionals with whom the student has previously had contact. These include teachers, librarians and community volunteer workers. It is anticipated that these professionals will work complementarily and informally with individuals and groups rather than in formal structured situations. From the community, volunteer help will be sought to act as experienced professionals, consultants, and as supplementary staff, and provisions will be made for their training as necessary. Older children will help those who are younger in certain of the centre's learning activities.

The key to understanding the goals of the new centre is to begin to think first of children and young people estranged from the materials through which education occurs, and then of activities designed to establish or re-establish contact between the two. The emphasis of the centre's programming will not be on the traditional educational concept of instruction, nor on the traditional library concept of building a collection, but on learning activities and on resource media that will assist students with their learning activities.

**Space Requirements**

(1) An underlying concept in providing space will be that it is readily accessible to both elementary school students, secondary school
students, preschoolers, and the adult public, with separate entrances for each group.

(2) Within the centre there will be an area developed for each particular group, elementary school, secondary school, and the general public. These specific areas will be areas with which each group primarily identifies. These areas can be defined by furniture.

(3) The preceding three areas, the materials and the facilities contained therein, will be available to all who use the centre. Theoretically, materials, space and facilities of the centre will be available to any of the three groups at any given time, providing that there is no infringement on the use of a particular group’s facility by one of the other groups. This means, for example, that New Canadian students from Britannia Secondary School will be able to use elementary school library facilities, providing this does not conflict with elementary school use. By the same token, a student in the elementary school will have access to the facilities and materials of the secondary school, providing this does not conflict with secondary school use. The same concept applies to the Public Library space.

(4) Particularly in reference to the elementary section, furniture will be scaled to the size of the students.

(5) School use of the centre space will be for the following kinds of activities:
   
   (a) Activities involving individuals who will be pursuing quiet reading, reference work, viewing materials, films, listening to recordings and tapes;
(b) For small groups of individuals doing similar kinds of activities or being instructed by a teacher or other individual;

(c) Large group activities engaged in reading, viewing, listening, discussing, or in being instructed;

(d) Informal, quiet activities that are pursued.

(6) Particular space requirements of these four kinds of activity groupings:

(a) Individual activities require carrels, tables, comfortable chairs, carpeted floor areas;

(b) Small group activities require tables, flexible seating, which can be separated temporarily by certain kinds of furniture;

(c) Larger group activities can be seated at table arrangements, on the floor, in areas that can be temporarily separated from other areas while the activity is in progress;

(d) Informal activities require comfortable, informal arrangements of furnishings; comfortable chairs, carpeted floors, cushions, stools, etc.

(7) A listening area: Somewhere in the complex, provision should be made for a listening area where some noise is involved. Here, recordings and tapes can be played for the benefit of the individual or groups of individuals. If possible, this should be an enclosed area.

(8) Viewing areas: The trend in the use of non print materials and media is to individual viewing and the use of materials and equipment by individuals or by groups of two or three individuals. Such an area does not necessarily have to be specialized, enclosed space but should be space that can at least be confined by furniture arrangements. For some kinds of viewing activities, study carrels provide adequate space.
(9) **Audio-visual space**: There must be space within the complex for storage of material and equipment for audio-visual purposes. Equipment that will be used by individuals basically should be available here. It should be centralized, close to the main charging or control area. The software that goes with this can be more decentralized and should therefore be on wheels so that it is movable.

(10) Some consideration should be given to providing a very quiet area for individual study by students involved in research.

(11) The sections of this complex that are more readily identifiable with the elementary and secondary schools will require spaces for:

(a) charging area;
(b) librarian's office and work area;
(c) stacks;
(d) book storage;
(e) periodical and paperback storage;
(f) card catalogue;
(g) picture files;
(h) reading areas:
- carrels,
- reference reading,
- leisure reading,
- for very young children;

(i) audio-visual hardware and software - storage and viewing.

It should be kept in mind at all times that the space requirements of each group should reflect the design of the complex, and at all times care should be taken not to duplicate spaces where one space will serve the needs of all. As space requirements will undoubtedly change from time to time, they must be planned for their flexibility.
It is vital that in order to ensure the successful operation of this resource centre, the professional staff provided both by the School Board and the Public Library Board be one unified staff responsible for the centre's operation. This concept implies a team approach operating under the direction of one leader. With this arrangement, care must be taken to ensure that certain staff members can be readily identified with a particular group or area. For example, elementary school children should primarily be able to identify with an elementary school librarian, and the secondary school students, a secondary school librarian. There should also be times when school children can seek and receive the services of Public Library Board personnel. The underlying criteria for selection of the centre's staff must be that they are committed to the principle of working as members of a combined elementary-secondary-public library resource centre team.