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ABSTRACT

The mission of this study is to identify reasonable standards for the space requirements of a small high school of under 100 students--perhaps even as small as ten--remote both in distance and social structure from the mainstream of the normal American educational system and to identify, at least conceptually, how such space can be used. Throughout the study it has been imperative to recognize that the mission is to provide "planning criteria" not "design criteria" nor design solutions and that it still remains the responsibility of the community and its architect and consultant to design the facility that recognized the uniqueness and distinctness of each individual community. Throughout it is assumed that the school program will conform to the required state curriculum standards, that space guidelines adopted by the state planning group will be used, that space guidelines should be equitable among schools of varying size and program, and that the delivery system for the buildings has not yet been established. (Author/IRT)

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## SMALL HIGH SCHOOL



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# PLANNING STUDY: PROGRAM AND SPACE GUIDELINES

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EA 009 878

# Alaska Small High School Planning Study

## Introduction

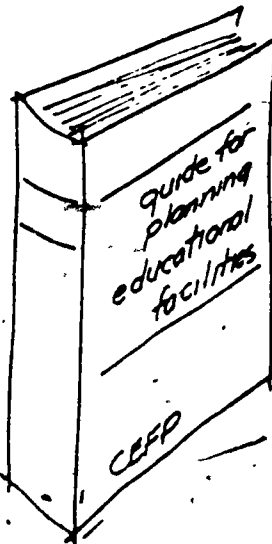
What happens if you plan a small high school of under 100 students - perhaps even as small as 10 - remote both in distance and social structure from the main stream of the normal american educational system? How do you bring students in these schools the "real life" experiences which prepare them to contribute to or may be only, survive in the complex socio-economic structure of the future? How do you bring to students in these areas the knowledge base with which they must work? How do you bring to the gifted the opportunity to develop their individual talents and to the average the opportunity to gain his highest potential?

These are some of the questions which surround the planning for small distal high schools in Alaska. They affect the types of programs to be considered, as well as the buildings in which these programs will operate.

Our mission is to identify reasonable standards for the space required for these high school facilities, and to identify, at least conceptually, how such space can be utilized. Throughout the study, it has been imperative to recognize that our mission is to provide "planning criteria" not "design criteria" nor design solutions, and that it still remains the responsibility of the community and their architect and consultants to design that facility which recognizes the uniqueness and distinctiveness of each individual community.

Assumption: It is assumed that each of the high school programs will conform to the required State standards including four required units of work in the 9th and 10th grades plus two electives, and three required units of work in the 11th and 12th grades plus three electives.

This program is based upon the traditional Carnegie units requiring 180 days of instructions.



USE & SUPPLEMENT  
"GUIDE"  
AS BASIC  
PLANNING DOCUMENT  
UNIT C  
EDUCATIONAL  
FACILITIES SURVEY  
UNIT E  
PROGRAM REQUIREMENTS

### TYPICAL ALASKAN PROGRAM BASED ON

CARNEGIE UNITS  
(1 hr / day / school year = 180 days)

- 3 Math & Science
- 3 1/2 Lang Arts & English
- 2 1/2 Social Studies
- 1 Physical Ed
- 6 Electives

Local option may increase

- + 1 Lang Arts
- + 1 Physical Ed
- + 1 Elective

State program may increase basic units to 19

Assumption: It is assumed that the space guidelines adopted by the State Planning Group will be used not only by the State as a guideline for allocating construction space and dollars to communities but will also be used as a planning guide by those communities in the selection of programs and the coordination of local existing resources with new proposed building facilities.

There were some distinct assumptions which were made concerning the development of space guidelines for small high schools. These were influential in establishing the designation of an amount of space to be provided for each enrollment group.

## FACILITY SPACE GUIDELINES

- ARE ESTABLISHED BY
- ENROLLMENT.
  - GROWTH POTENTIAL
  - EXISTING FACILITIES
  - EXISTING RESOURCES
  - OTHER

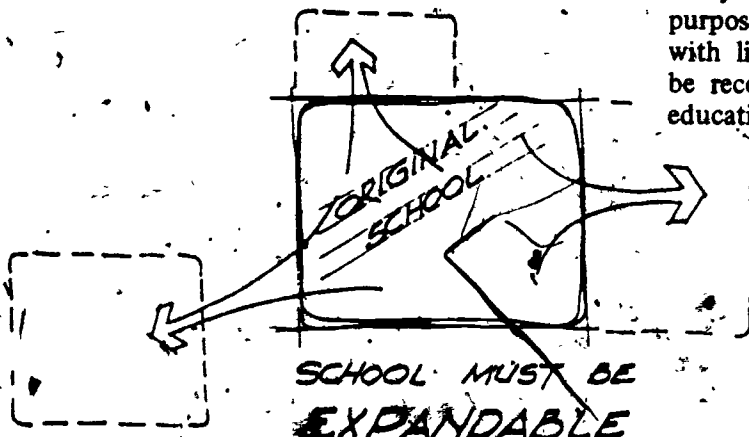
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TOTAL	SF

SPACE STANDARDS SHOULD BE

## EQUITABLE

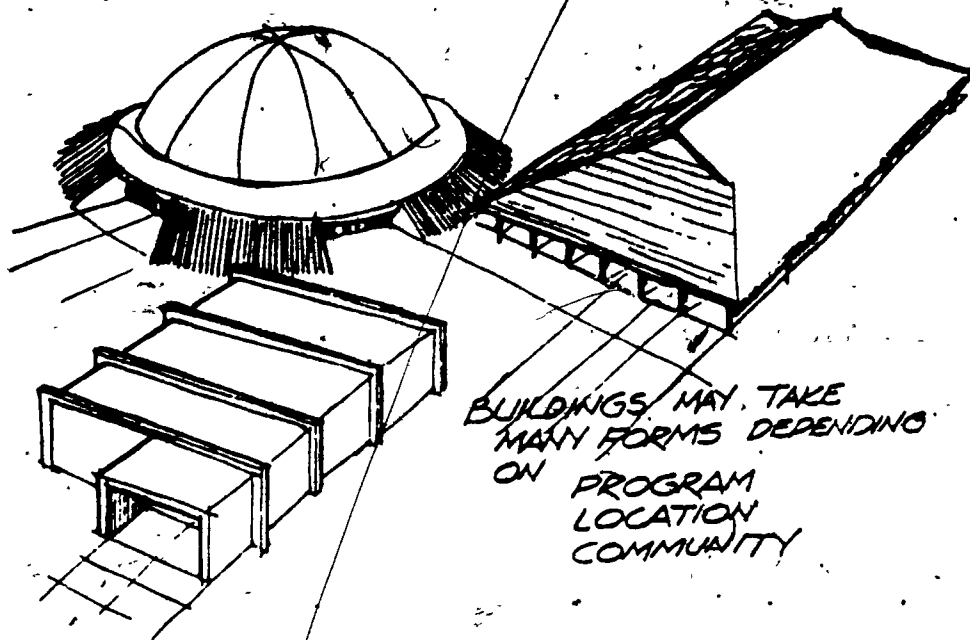
AMONG SCHOOLS OF VARYING SIZE DIFFERING PROGRAM

Assumption: Space guidelines should be equitable among schools of varying size and differing program. It is assumed that the overall administration of the program would require a consistent allocation of space for each school depended upon its present and/or anticipated enrollment. It is recognized that each community may have some existing resources which can be used to supplement space of program activities whereas other may have little, if any. Therefore variations in the allocation of space may exist depending upon these resources. No attempt has been made in this study to arrive at such variations. It is assumed for the purposes of space guidelines that each community will begin with little, if any, available space resources and these will be recognized in the process of identifying and prioritizing educational needs.



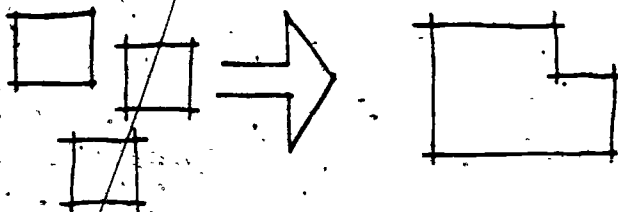
SCHOOL MUST BE EXPANDABLE

TO ACCOMMODATE GROWTH IN ENROLLMENT OR PROGRAM



BUILDINGS MAY TAKE  
MANY FORMS DEPENDING  
ON PROGRAM  
LOCATION  
COMMUNITY

Assumption: The "delivery system" for the buildings has not as yet been established. Thus, the buildings may take many forms depending upon local climate, and community attitudes, as well as size and program. The space standards, therefore, must not assume any geometric planning module but must remain adaptable to the specific design criteria established for the building.



ESTABLISH  
PLANNING MODULE  
AS A GUIDE FOR  
BUILDING DESIGN

## Design Enrollments.

For the purposes of space allocation, categories of design enrollment were established. The original proposal was to have a series of design enrollments in small increment from 10 up to and including 500 students. However, these increments became difficult to deal with because of their narrow range and therefore were reduced to a limited number. These categories do not suggest that they represent appropriate numbers for effective educational programs, but rather were selected for ease in projecting space guidelines. Interpolations of enrollments within these categories can be made if desirable, particularly in the larger enrollment categories.

Obviously, the most difficult space guidelines to project are those for the smaller enrollments, particularly under 100 students. Here the type of program to be conducted, other community resources available, the quality of the educational faculty, and the intensity of the students themselves all may have more to say about the success of the program than the amount of the space available.

### RECOMMENDED DESIGN ENROLLMENTS

10-20  
21-32  
33-46  
47-62  
63-80  
81-99

Space guidelines have been projected for design enrollments of up to 99 students using instructional unit enrollments. Above 100 students, it is suggested that 150 gross square feet per secondary student be used.

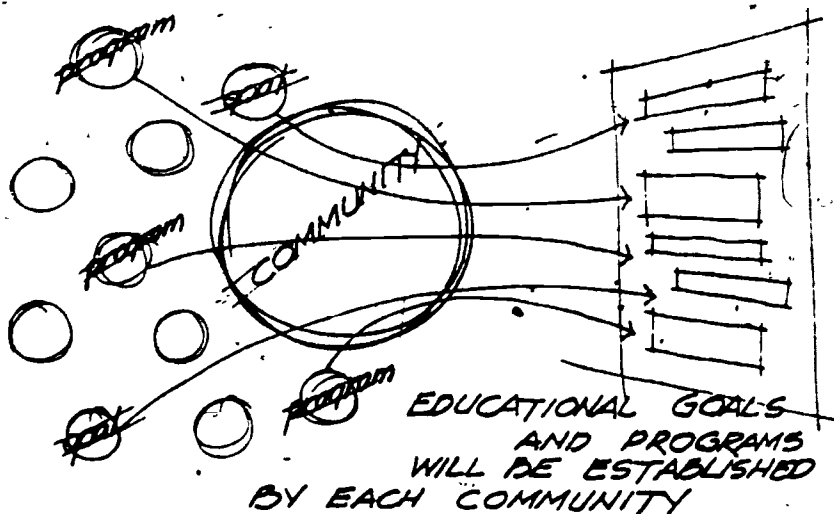
It should be noted that the summation of individual space guidelines will result in facilities of excessive area because of the projection of space requirements for individual activities. Once the educational program has been selected, the Architect and Educator should establish the specific space needs based on the guidelines. Consideration of multi-functional use, space sharing, or program sharing should be made in determining the final space allocation. The impact of these possibilities will be discussed further in the conceptual model.

Space guidelines have been divided into 4 related areas: academic area, skills area workshops, activity areas, and support facilities and services.

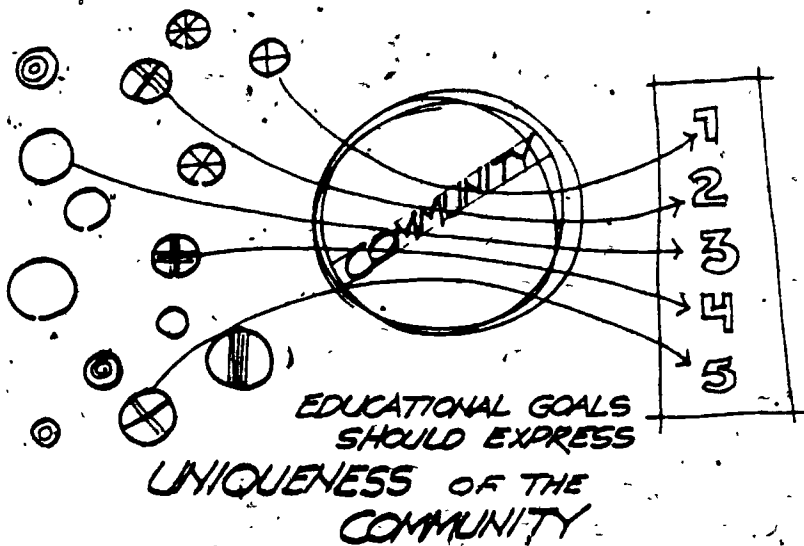
Distal High School  
Distal Alaska

What would a small high school for 30 - 40 students in a remote area of Alaska really be like? What would be the design criteria that should be used to develop a school of this size? How would you go about establishing design criteria for a facility in a remote location with so few students? Let us presume that the small, rural, remote community of Distal, Alaska is to have a new high school built under this program. What would be the conceptual model that could be followed to develop a facility such as this?

Let us presume that the Community School Committee for Distal has been told that it qualifies for a new high school facility under the state program. The Community School Committee has worked with the State Department of Education goals and proposed curriculum by utilizing the Phi Delta Kappa prioritizing technique. They are now ready to establish the Design Criteria for their school facility with the Educational and Architectural Consultant.



The Community School Committee has also made an inventory of the resources available in the local community to supplement the educational program. This has been recorded for use in the development of an overall program for the high school in the manner recommended by the State Educational Board. They have also inventoried the other physical facilities which are available to them in the Elementary School and which might be coordinated with the High School program. Although limited, these facilities will supplement an otherwise meager and sparse resource of spaces available for high school educational programs.



The educational goals and curriculum developed by the Community School Committee expressed the uniqueness of the Community of Distal, Alaska and indicated those specific programs which could be of advantage to their students. This uniqueness should carry through for the program for the facility design and this should also reflect the needs and resources of the Community in all areas.

### FACILITY SPACE GUIDELINES

ARE ESTABLISHED BY

ENROLLMENT

GROWTH POTENTIAL

EXISTING FACILITIES

EXISTING RESOURCES

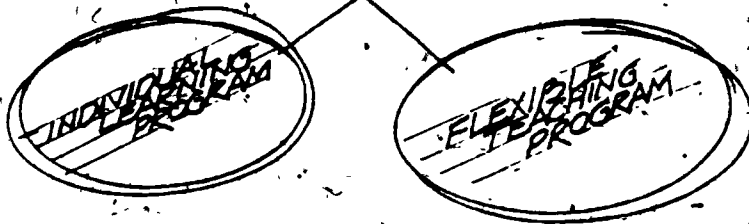
OTHER

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TOTAL	SF

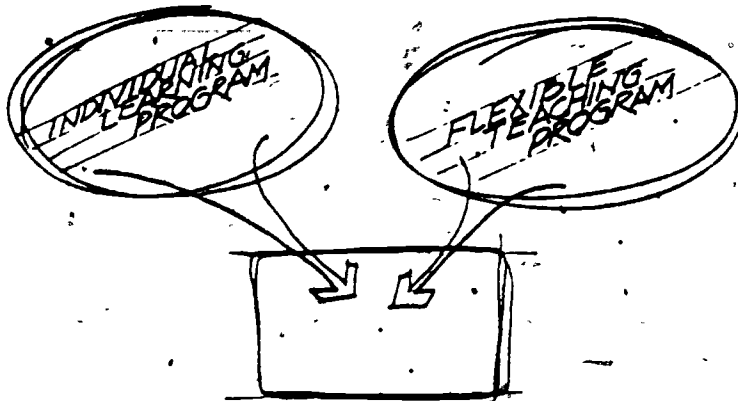
The Community of Distal presently has about 30 students who are of high school age. By the time the new facility is available, they will have between 35 and 40 possible high school students, including those coming up from lower grades. They hope to be able to retain the students of the upper grades by having a program of high interest and motivation; however, traditionally many of the 11th and 12th graders have been lost to the high school program as they have seen little or no benefit in continuing their education.



ALTERNATIVE CONCEPTUAL  
MODELS FOR  
SMALL HI SCHOOL  
PROGRAM

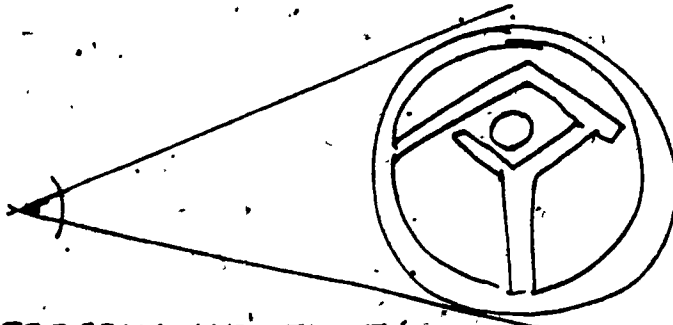


The Community School Committee recognizes that there are 2 possible alternative conceptual models for a high school program for the community; either one based upon an individual learning program for each student or another based upon a program of flexible scheduling and reaching by the faculty. As neither the facility nor the teaching staff is as yet a reality, it must be recognized that the potential facility must accommodate either of these programs. It must in essence, not stand in the way of any potential program which a creative staff might develop for the high school.



FACILITY MUST ACCOMMODATE  
EITHER PROGRAM

The Community School Committee hopes that the program and facilities can provide every student with the possibility to make a physical and psychological transition from the rural and remote situation of Distal, Alaska to the wider areas of the State and the world!



PROGRAM AND FACILITY  
SHOULD PROVIDE STUDENT

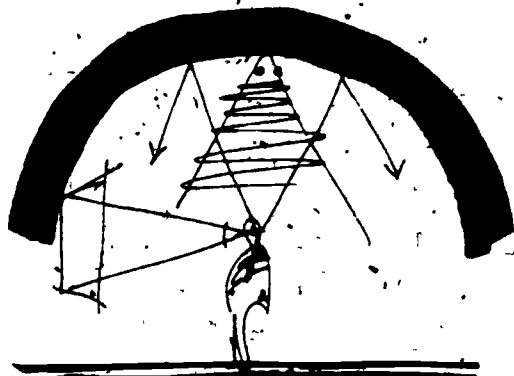
PHYSICAL & PSYCHOLOGICAL TRANSITION

This implies that the program and the facility should present a variety of human values as well as fields of knowledge for each student to explore, become familiar with, and prepare to confront. Few, if any, of the students have had the opportunity to travel extensively to the urban areas of either Alaska or the States, and are as yet unfamiliar with many of the opportunities and risks which they may confront. The high school program should allow each student to experience such risks without serious penalty.

PROGRAM AND FACILITY  
SHOULD PROVIDE VARIETY OF  
HUMAN VALUES

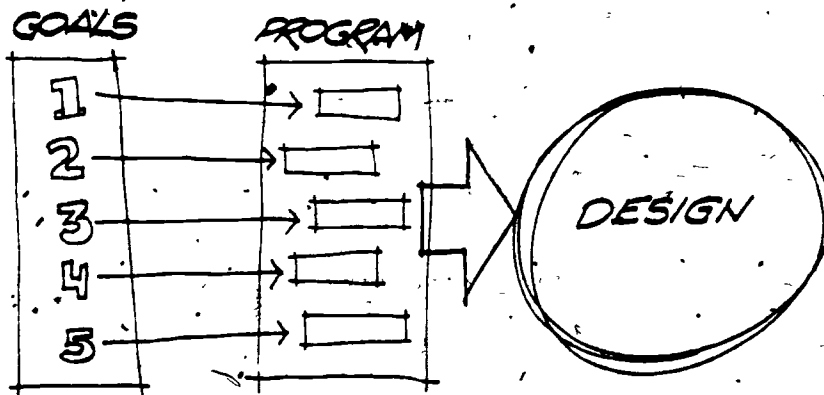
FIELDS OF KNOWLEDGE

Surmounting this all is the desire of the Community School Committee that the new facility should provide a quality environment for effective education to the extent possible in the remote area of Distal, Alaska. It is recognized that not every opportunity can be offered but, to the degree possible, opportunities should exist for each of the students to fulfill their highest potential and deepest expectations.



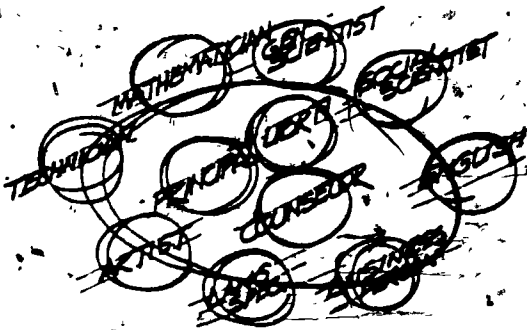
**FACILITY SHOULD PROVIDE  
QUALITY ENVIRONMENT  
FOR  
EFFECTIVE EDUCATION**

Thus, the educational goals expressed by the Community School Committee and their Phi Delta Kappa explorations should be reflected in the educational program for the facility itself. Once the program is identified for the facility, the educational and architectural consultant for the community School Committee can then develop a design which best suits the needs of that program.



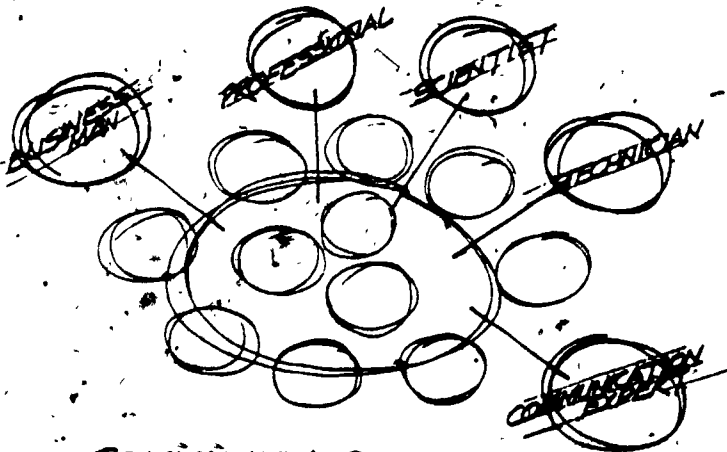
**FACILITY DESIGN MUST REFLECT  
NEEDS AND  
RESOURCES**

Conversely, it must be accepted that the faculty coming to the new facility must be carefully selected so that they are generalists in their fields with sufficient interests and concerns not to be of narrow vision. They must recognize that their particular field in a small school such as this, must be approached with extreme flexibility and individualism to allow each student to pursue the field at their own level.



FACULTY MUST BE  
 GENERALISTS WITH INTERESTS  
 NOT  
 SPECIALISTS

In addition the faculty must recognize that the community has something to offer to the educational system. The local business people, professionals, and technicians can supplement their individual endeavors and enrich the program significantly.



COMMUNITY BUSINESS,  
 PROFESSIONALS AND TECHNICIANS  
 SHOULD  
 SUPPLEMENT FACULTY

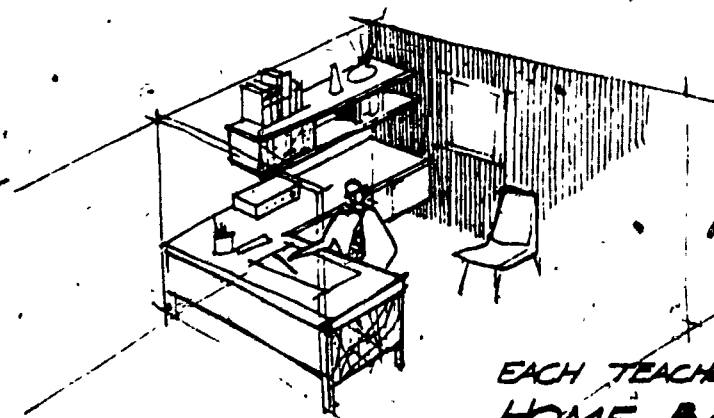
**SMALL HIGH SCHOOL PROGRAM  
SHOULD BE BASED ON**

**INDIVIDUAL LEARNING**  
*where student seeks knowledge*

**AS WELL AS**

**CLASSROOM TEACHING**  
*where teacher imparts knowledge*

The Community School Committee has recognized that a small high school program must have a strong base in individual learning where students seek knowledge as well as classroom teaching where the teacher imparts knowledge. It is essential that the learning program be based upon a student managed system as well as a teacher controlled system. Therefore, it is essential that each teacher have a home base which they can use in addition to the classroom area to develop teaching plans, to counsel individuals in their particular pursuits, to evaluate the progress of the students with the students and/or their parents, and to gather and develop information for new course curriculum.



**EACH TEACHER SHOULD HAVE  
HOME BASE  
TO  
PLAN  
COUNSEL  
EVALUATE  
GATHER INFO**

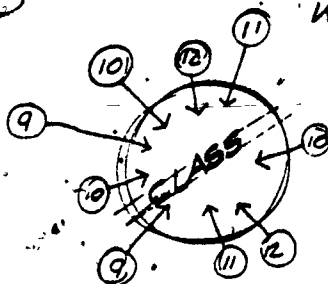
LEARNING PROGRAM SHOULD BE  
BASED ON

STUDENT MANAGED SYSTEM  
where student seeks knowledge  
AS WELL AS

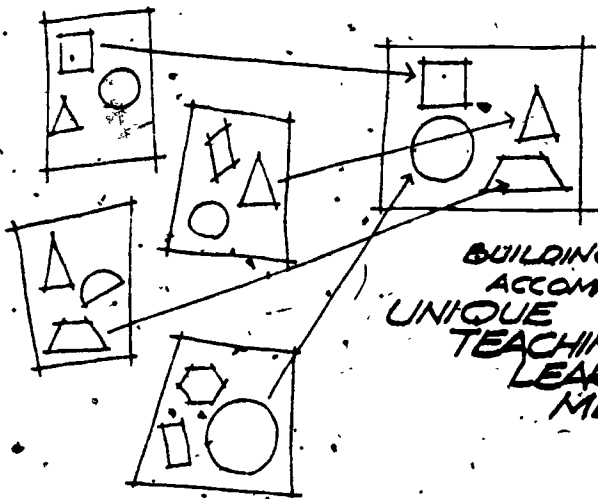
TEACHER CONTROLLED SYSTEM  
where teacher transmits knowledge

If, the high school students are to have the possibility for individual initiative, it therefore follows that the facility will be multi-graded, rather than sequentially graded. Each person in the school will be able to go to classes with students of other grade levels and thereby will be able to mix their experiences together. Each will perform at his own level and learn at his own pace, even though they are in class with a student of a higher or lower grade level. This will mix ability levels in such a manner that the upper classmen will be able to help the lower classmen and, thereby, become a part of the teaching as well as learning experience.

### MULTI-GRADED CLASS GROUPS



- WILL - MIX EXPERIENCED  
WITH INEXPERIENCED
- ALLOW LEARNING AT  
STUDENTS PACE
  - MIX ABILITY LEVELS
  - GAIN STABILITY



**BUILDING SHOULD  
ACCOMMODATE  
UNIQUE  
TEACHING AND  
LEARNING  
METHODS**

Therefore, the building itself should be able to accommodate unique teaching and learning methods which might not be appropriate in a high school of larger number.

How would a curriculum be set up for a small high school of this nature? There are some unique organizational devices which can be used to make the curriculum and the program more effective for students who are learning on an individual rather than a group basis. These include the following:

**Phasing** The phasing of curriculum content can widen the variety of subjects available to students. A large number of students in the school can study one major curriculum topic at a time. Phasing assumes a non-graded structure which allows a 9th grader to be in the same class with an 11th or 12th grader. This eliminates the need to offer all courses of a particular area, such as Science or Social Studies, each year but allows them to be offered in alternate years on a schedule which allows every student to have the opportunity to take them during the 3 or 4 year high school cycle. Phasing may also accomplish one other sense of community for the students allowing all of them to be engaged in one major endeavor at one time, therefore focusing not only their in-school but also, their out-of-school efforts.

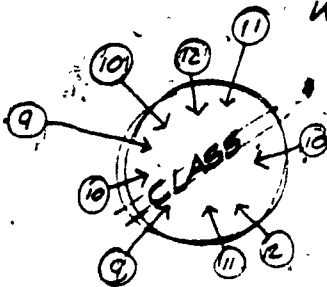
YEAR 1	YEAR 2
BIOLOGY	CHEMISTRY
HUMANITIES	LANG ARTS
	FOR LANG 2
FOR LANG 1	<del>FOR LANG 1</del>

**PHASING  
OF CURRICULUM CONTENT  
WILL WIDEN THE VARIETY  
OF SUBJECTS**

## Multi-Grading

The multi-graded approach used in Distal High School is also a unique organizational pattern lending to its success. By using multi-graded class groups, we can upgrade the curriculum, mix the experienced with the inexperienced, gain stability and continuity and have a side benefit of having kids teach other kids. This is particularly true in areas such as music, art, and skills areas.

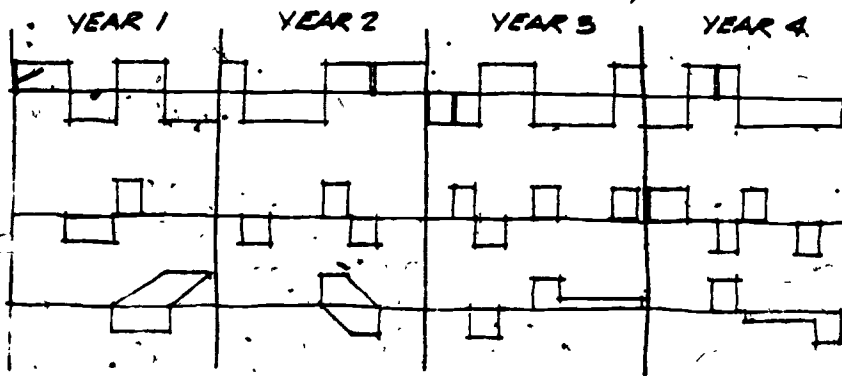
### MULTI-GRADED CLASS GROUPS



- WILL -
- MIX EXPERIENCED WITH INEXPERIENCED
  - ALLOW LEARNING AT STUDENTS PACE
  - MIX ABILITY LEVELS
  - GAIN STABILITY

## Mini-Courses

Another device can be short-term mini-courses. These can spice up the curriculum by offering a quick and intense involvement in a particular subject area for a short period of time; 3 or 4 weeks or even 3 or 4 days, if the time and human resources are available. For example, a talented person in a particular field such as soap stone carving, weaving or art, or science could establish a program in which all students are involved for 2 or 3 days or a week.



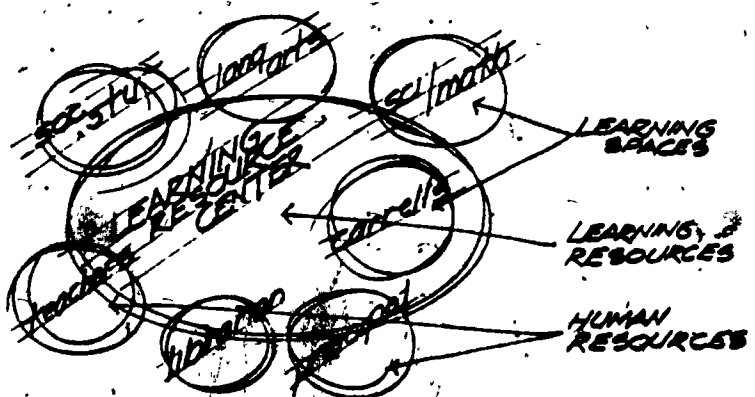
SHORT TERM  
MINI-COURSES  
CAN SPICE UP THE CURRICULUM



## Uncommitted Time

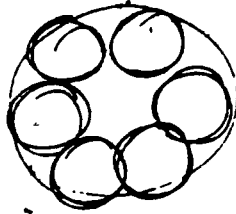
Uncommitted time is another way of enriching the program of a small high school. The normal high school students racing from class to class may not have the time to think by themselves, evaluate their own situation, and develop their own program. They may not have time to do anything except listen to the teacher. A considerable amount of time left open for both students and teachers to use at their own discretion allows for small group enterprises, individual indepth research and study, remedial learning in those areas where individual students have need, and flexible scheduling of laboratory and skills area workshops.

The Learning Resource Center is the focus of the learning experience in Distal High School. In the Learning Resource Center a variety of instructional aids including books, as well as maps, charts, slides, models, and new teaching media in the visual aids such as slides, films, video-tape are available to students either individually or in groups. Thus, the student is able to experience a world of information at his finger tips and according to his need. The Learning Resource Center is also the physical center of the learning activity of the small high school. On one hand, it is the focal point for material resources including teaching media as well as learning spaces such as classrooms, laboratories, and skills center workshops. It is also the focal point for the human resources of the teachers, the librarian, and guidance people. This Learning Resource Center and its adjacent areas form the academic core of this small high school.

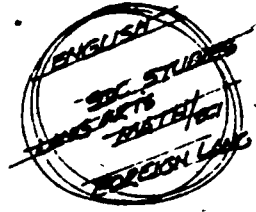


MATERIAL AND HUMAN RESOURCES  
COMPOSE THE  
ACADEMIC CORE

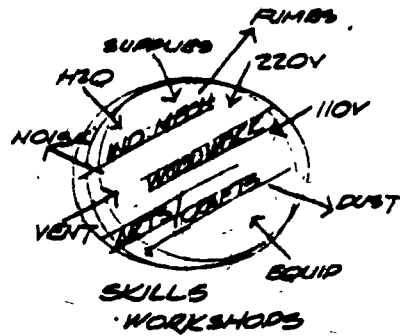
## SPACES FOR MULTI-GRADED SCHOOL



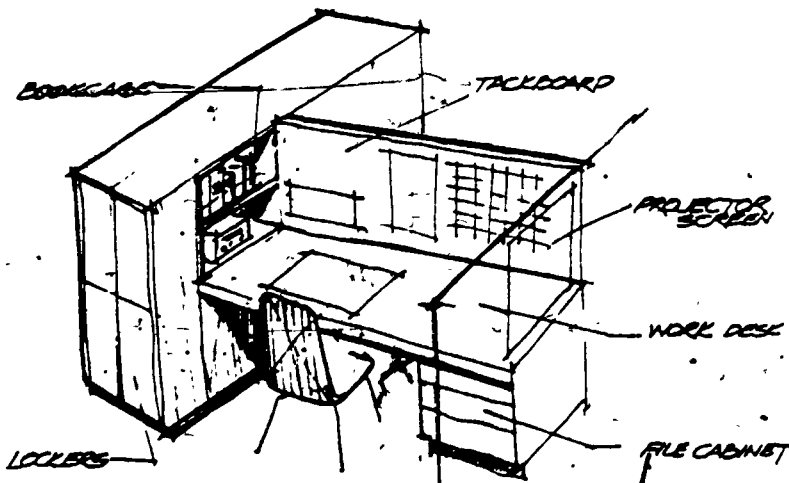
INDIVIDUAL  
STUDY BASE



GROUP  
MEETINGS

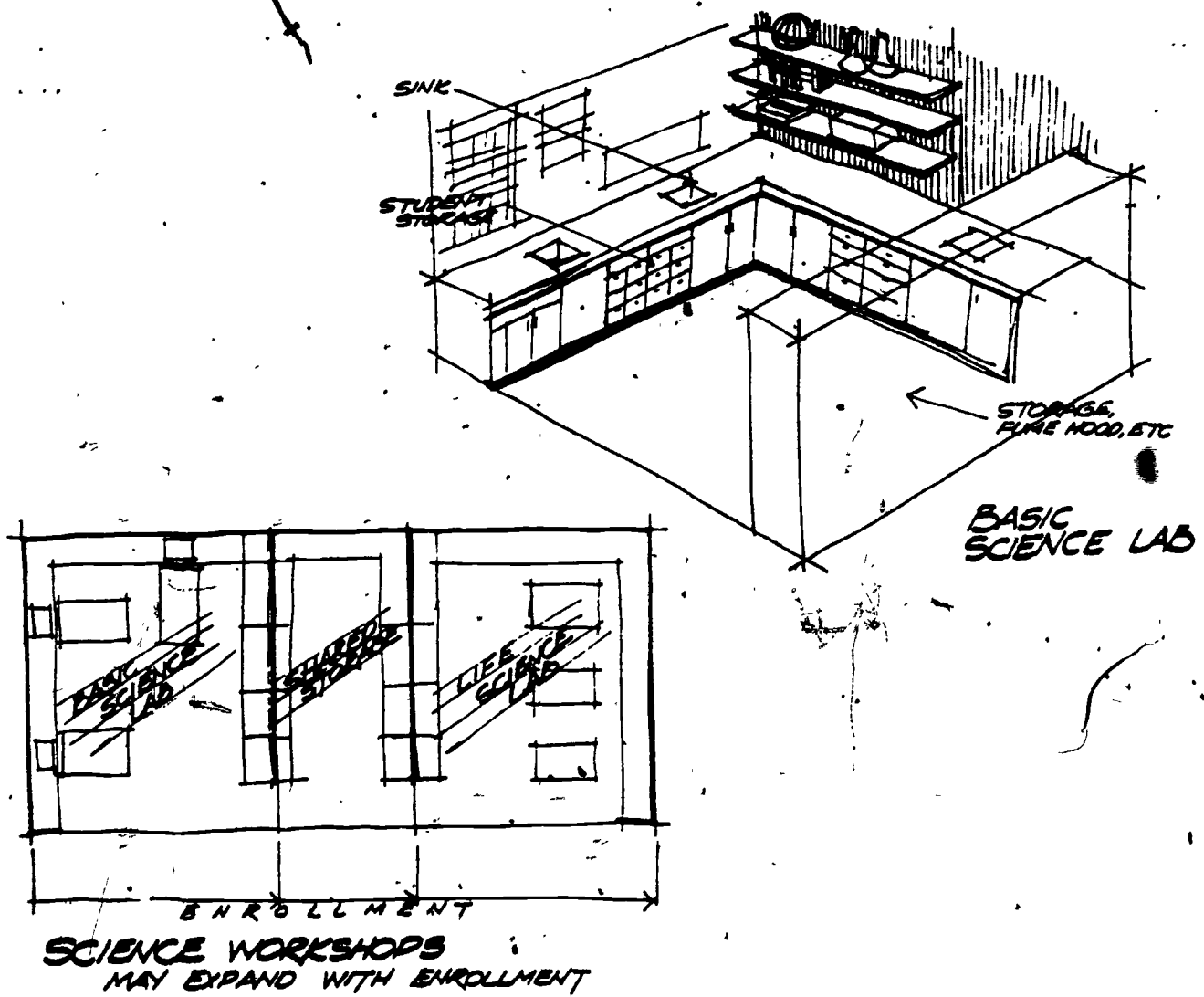


There are three types of learning spaces envisioned to be used in Distal High School. An individual studies base should be available too for each student where he can follow his individual quest for knowledge, and which can serve as a headquarters for his academic pursuits. Group meeting rooms such as classrooms, seminar rooms, laboratories should be available for English, Social Studies, Math, and Science. Skills workshops require very special sorts of services or accommodate very special sorts of activities such as woodworking, arts and crafts, or industrial mechanics. Each of these types of spaces performs specific needs for program activities in the small high school learning program. Students may spend as much as half their time in individual study in a carrel or in a skills workshop. The remainder of their time can be in group learning situations in classrooms, seminars, or laboratories.

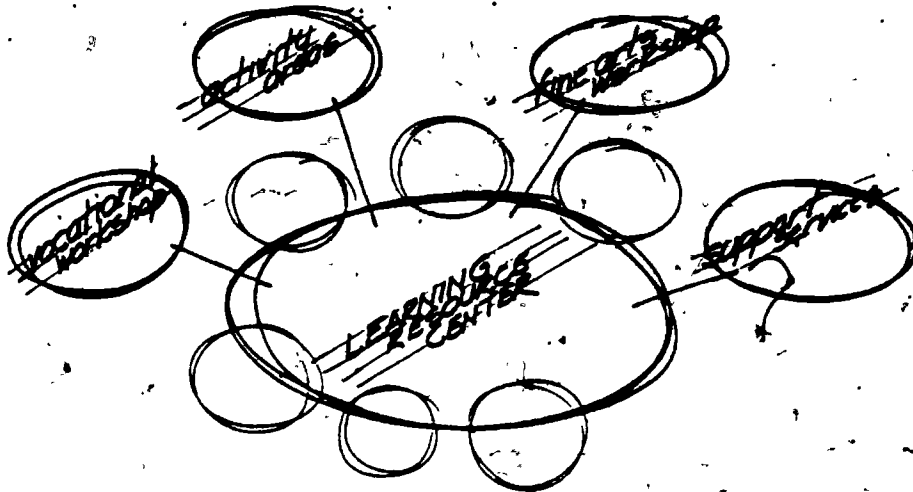


The individual learning base for each student is an important component of the small high school program. In Distal High School, every student should have such a learning space for his own; either a study carrel which provides space for books, a locker, a file cabinet, and a place to bring audio-visual equipment or a skills area in which he can pursue an individual interest intensively if he so desires.

The group spaces can be either a small group or may include as many as 15-20 students if two classes come together for any particular purpose. More likely in Distal High School, there will be spaces for 10-12 students to meet with a teacher to engage in a particular scheduled class or study activity. This may include watching films, participation in business or mathematics, laboratories with equipment, such as calculators or typewriters, or in science laboratories engaging in Chemistry, Physics, or Biology. The basic science laboratory in Distal High School should be a very flexible area which can be used for several types of science on a shared basis as science programs are phased from year to year. This may be also true in vocational areas such as woodworking, metals, and electronics.

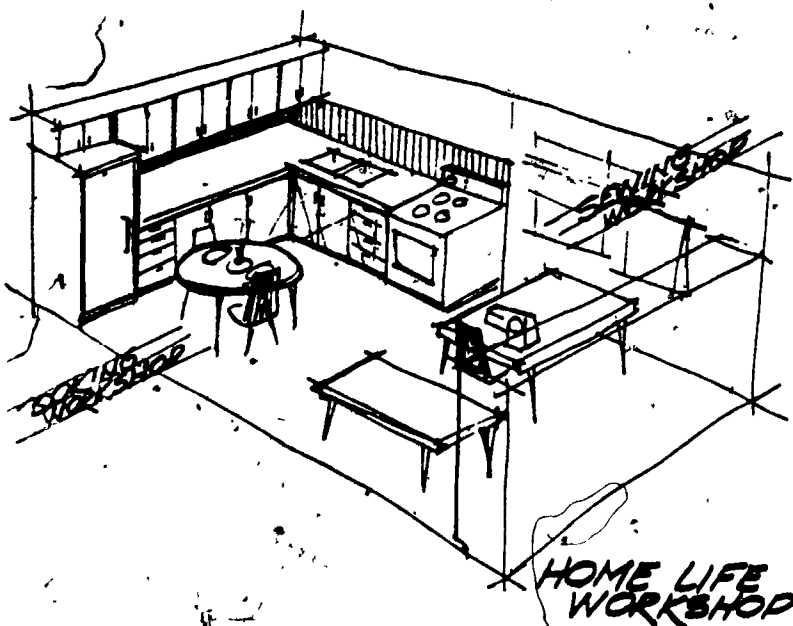


The Learning Resource Center is supplemented by workshops and activity areas of special nature such as science, business vocational areas, fine arts areas, and supports and service areas.



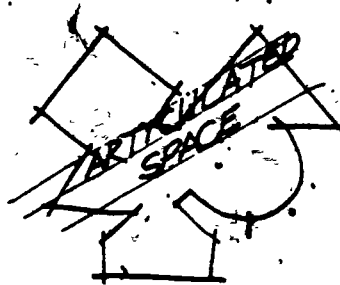
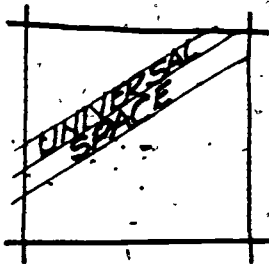
**ACADEMIC CORE  
IS SUPPLEMENTED BY  
WORKSHOPS AND ACTIVITY AREAS**

Workshops may also be available for home living activities, and arts and craft activities. These might also be phased from year to year or term to term depending upon the number of students interested in a particular course or the curriculum established by the Community School Committee.



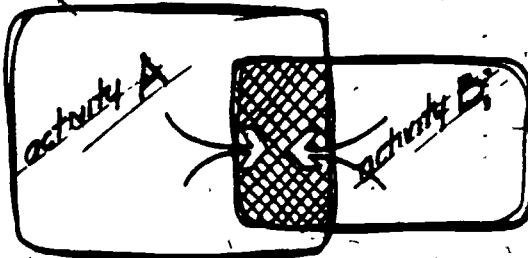
One of the considerations in the design of a small high school is the character of spaces in the facility. They can be of two types; either "Universal" space in which diverse activities can occur simultaneously or sequentially or "articulated" space which can only accommodate one type of activity. It is important to recognize that universal space which will accommodate more than one activity over a period of time should receive the priority.

Although articulated space can provide for specific activities, it is the least efficient use of space. If specialized space is provided for each activity, the total space required for a school will probably exceed the space available in the budget. The use of universal space which can be multi-functional can reduce the overall space requirements and economize the cost of the facility.



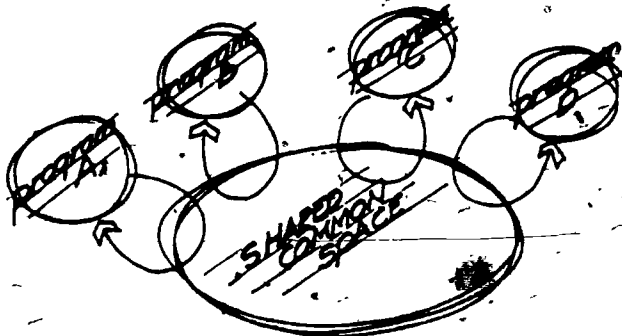
SPACES IN MULTI-GRADED SCHOOL  
CAN BE  
UNIVERSAL  
OR  
ARTICULATED

There are many ways in which space sharing can provide space and program flexibility in a small high school. It is important that these be explored in the design of the building as much as possible so that the maximum number of opportunities can be provided to the students.



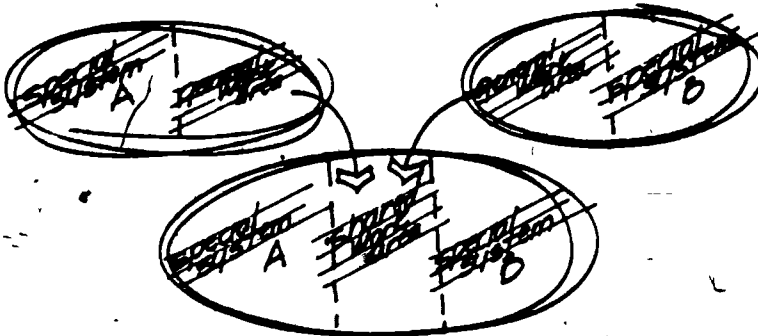
SPACE SHARING  
CAN PROVIDE  
SPACE AND PROGRAM

For example, programs can share space by rotating the use within the space. This is very common in the general academic area where such things as History, Economics, and Social Studies may all share a common space.



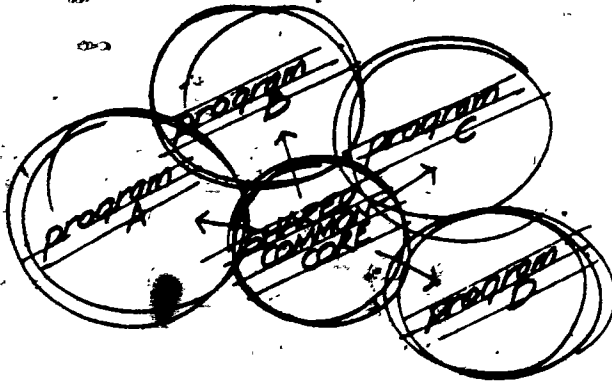
PROGRAMS SHARE SPACE  
BY  
ROTATING USE

Programs can also share space for common activities. For example, a science laboratory may have one area specifically designed for Physical Sciences while another area of the room can be designed for Life Sciences. The space in between can be a shared work area used by both depending upon the need at the time.



PROGRAMS CAN SHARE SPACE  
FOR  
COMMON ACTIVITIES

Programs can also share space by common services. A common core of services and utilities can serve several programs. Thus, and Art Lab may also be able to serve as a Science or Home Living Laboratory if it has appropriate storage and open space. The common shared core can include the sinks, work space, and basic equipment.



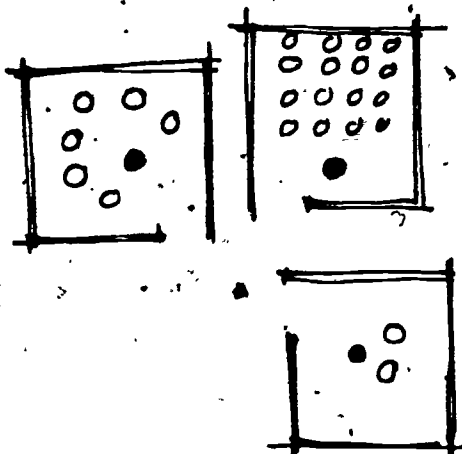
**PROGRAMS SHARE SPACE  
BY  
COMMON SERVICES**

Each student can have the opportunity to explore, learn and achieve at his own speed and to his ultimate capacity. The program can have a strong emphasis on individual student responsibility and participation in learning programs. Through these means, the individual's ability and desire to direct his own learning for a productive lifetime can best be achieved. In addition, Distal High School can recognize innovative teaching programs which may not otherwise be considered. Programs such as Team Teaching allows each teacher to do his best job in his best subject by cooperating with other faculty members.



**TEAM TEACHING  
CAN ALLOW EACH  
TEACHER TO CONTRIBUTE**

Another program, variable group sizes, can allow sizing each group according to the learning process being used or material being studied. Large groups can learn basic concepts or knowledge. Medium size groups can learn ideas or techniques. Small groups can exchange and examine ideas together, and individuals can search and experiment with specific knowledge in detail.



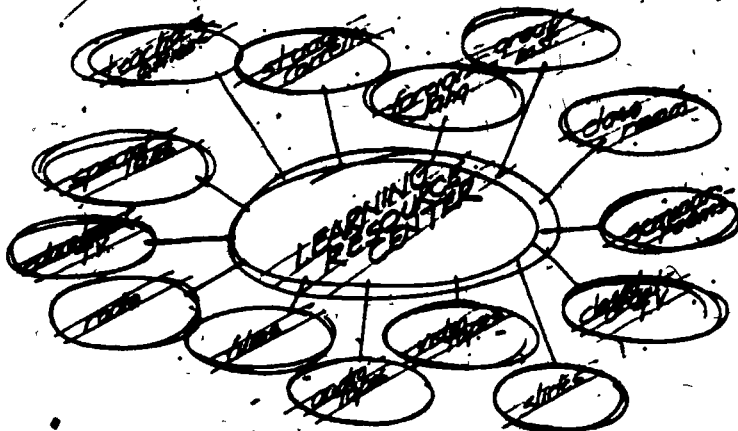
**VARIABLE GROUP SIZES  
CAN ADAPT PROGRAM  
TO NEED.**

Thus, Distal High School can be an effective teaching and learning environment for all students in a remote, rural situation and allow them to fulfill their highest potential whether to stay in their own area or to venture into the world at large.

#### Academic area

The focus of the academic area is envisioned to be the Learning Resource Center, particularly in the lower enrollment areas. It is the depository for teaching resources, both physical and human. It should be readily accessible to individuals and groups and should be closely related to specialized learning laboratories. One of the major components in the Learning Resource Center which can bridge both learning and social from remote areas to the outside world, is the Audio-Visual Information Center. Here, a well supplied source of learning materials can bring the world of today into the classroom for all students.

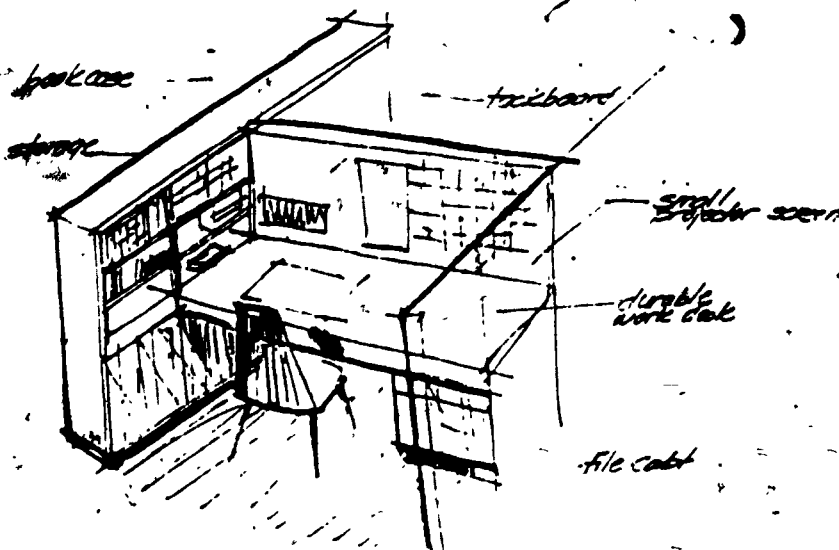




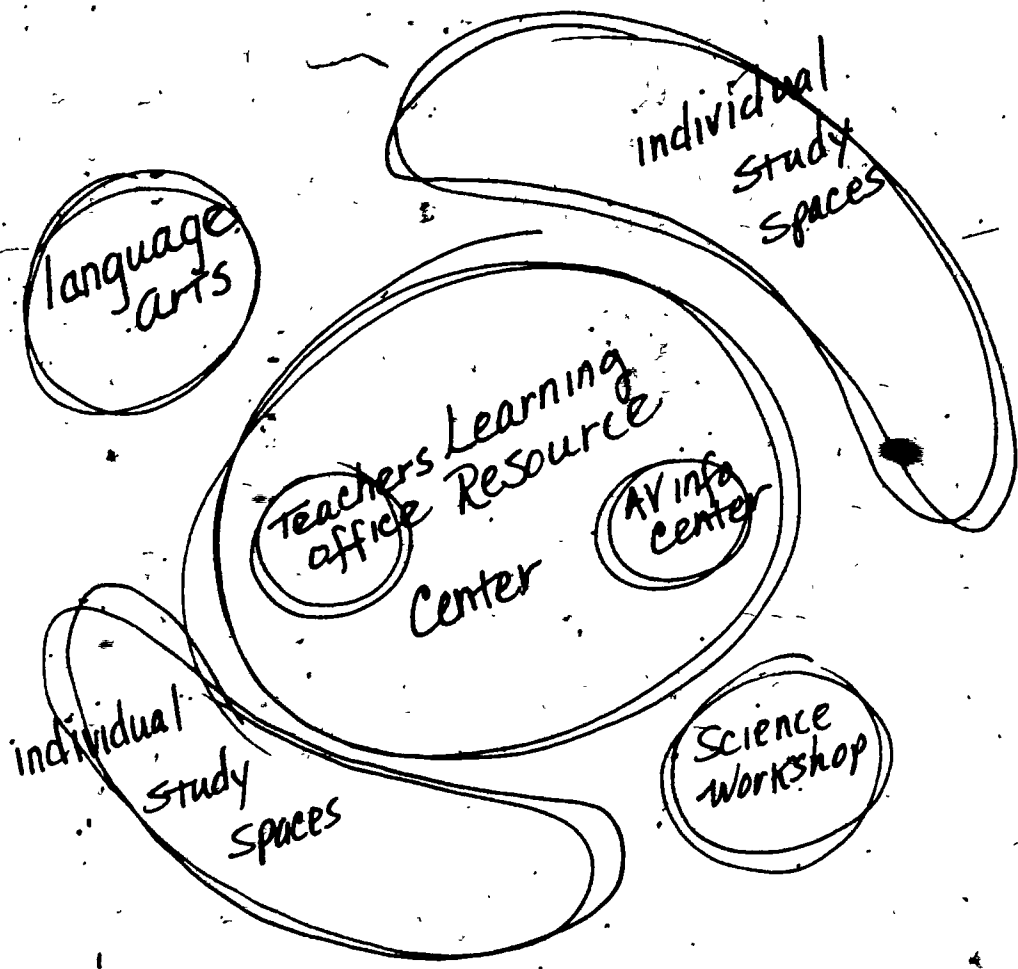
**LEARNING RESOURCE CENTER  
IS FOCUS OF  
LEARNING EXPERIENCE**

The academic areas of the very small school are envisioned to be a reflection of the one-room school house. Students will spend the majority of their time in this area either in small group or individual study. In the smaller design enrollments up to 50 students, the major learning space will be the Learning Resource Center itself with supplementary small general and special classrooms and laboratories.

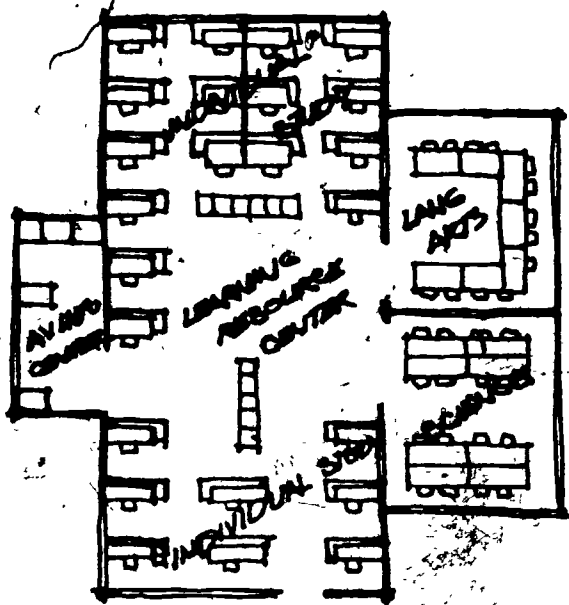
An important component of the smaller design enrollments is the provision of individual study space. At the lowest enrollment (10-20), it is anticipated that 100% of the students will have an individual study space available. As the design enrollments increase and other sources are available, this percentage is proposed to be reduced to recognize the normal individual study or research areas which are incorporated into the Learning Resource Center and Audio-Visual Information Center.



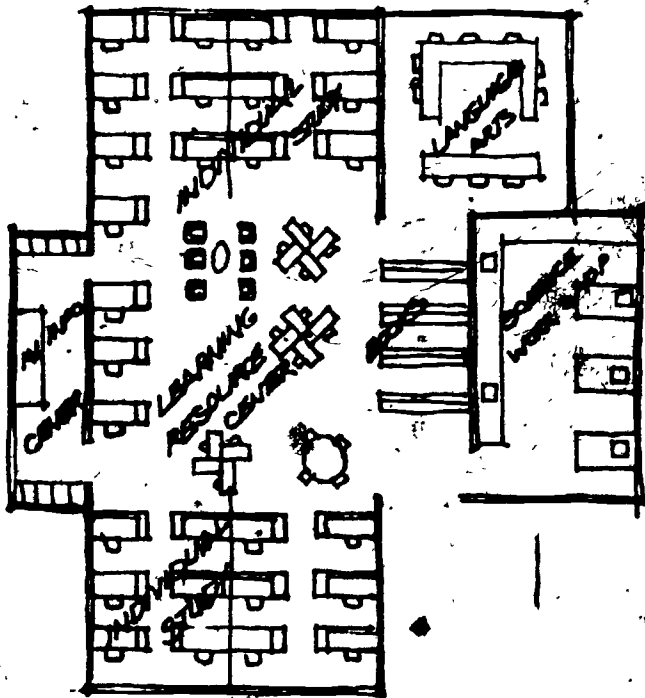
Organizational models for the academic area showing the approximate proportions for floor area dedicated to each activity for each design enrollments up to 100 students are shown on the illustrations.



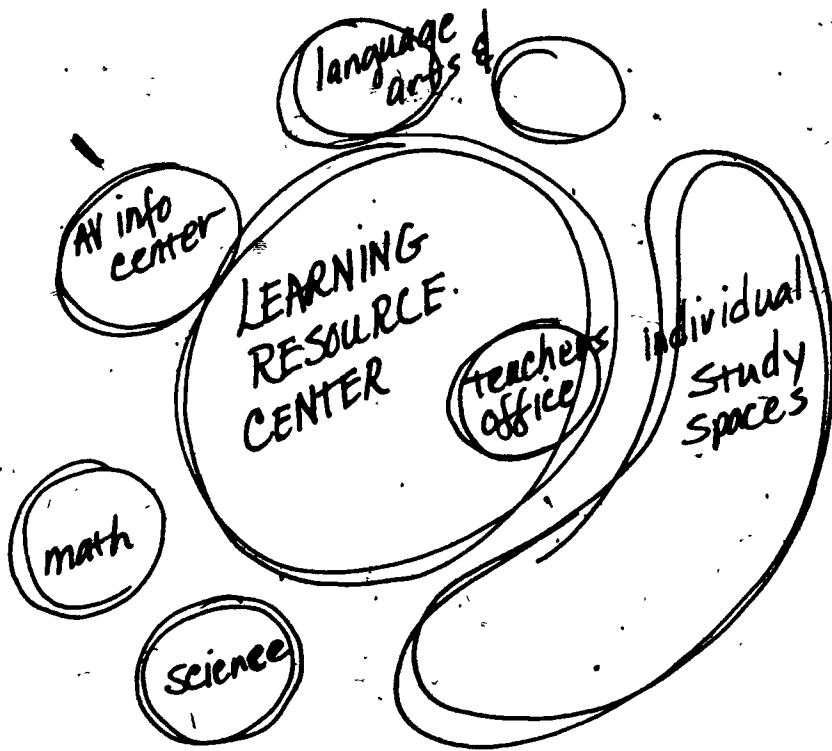
## ACADEMIC AREA-1



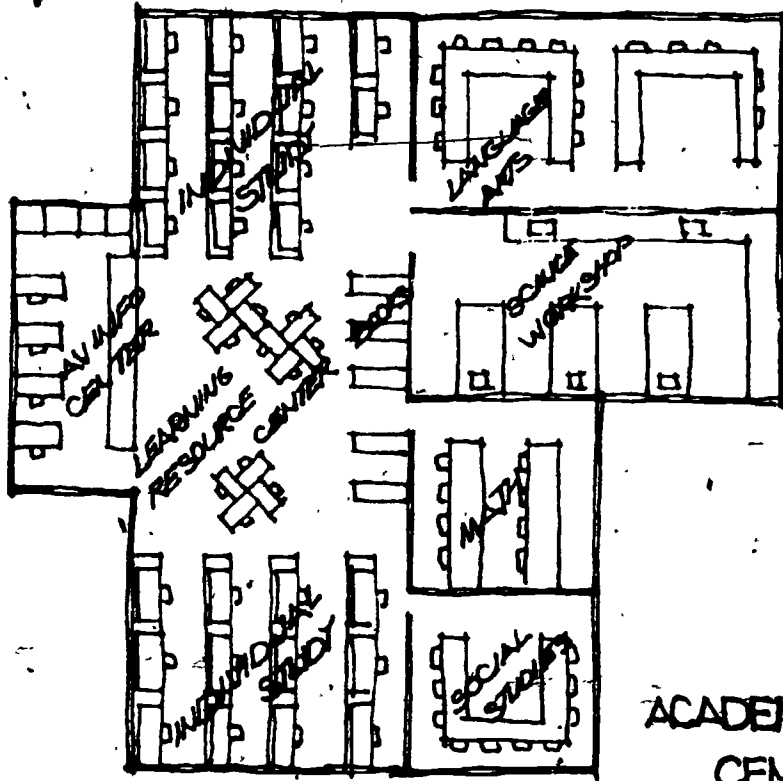
ACADEMIC CENTER - A



ACADEMIC CENTER - B

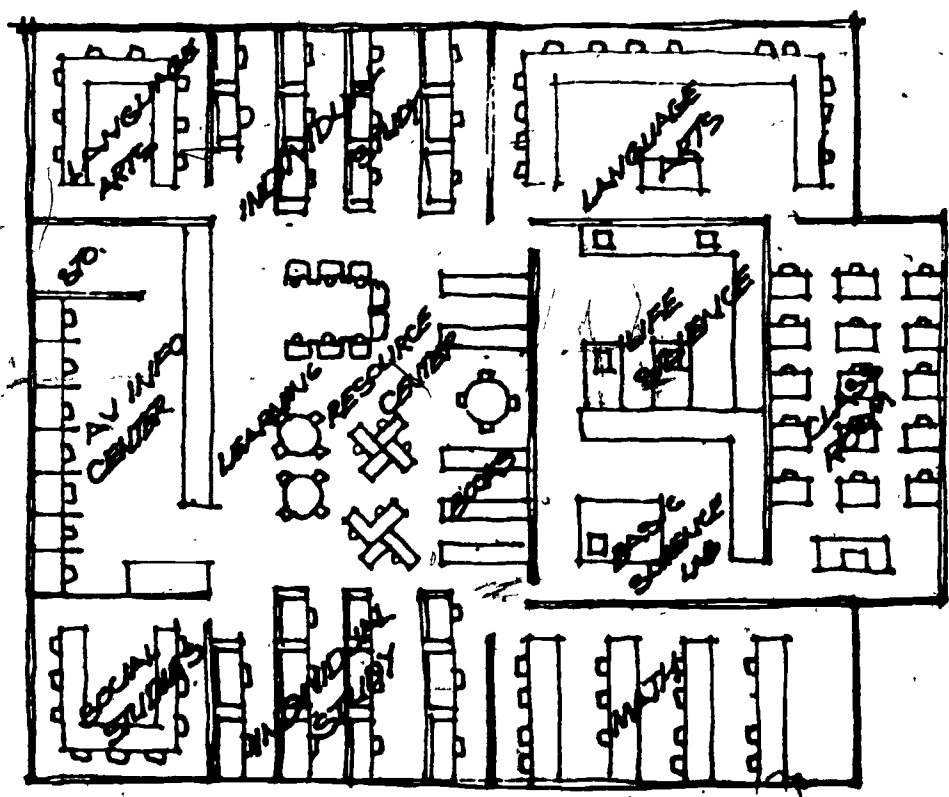


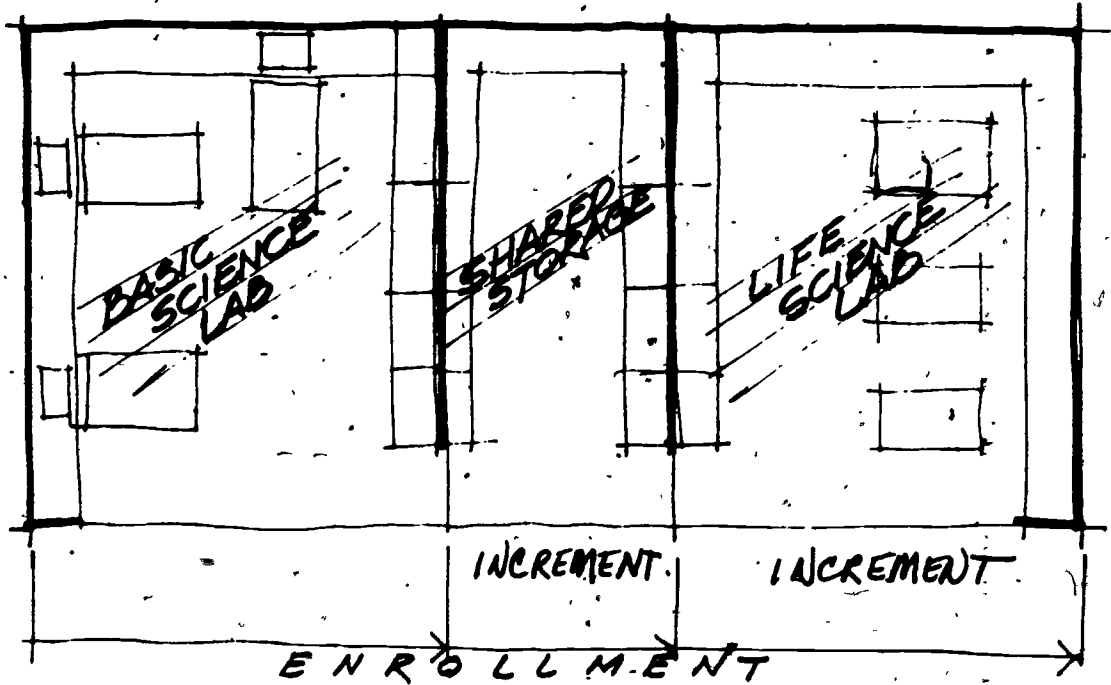
## ACADEMIC AREA-2



ACADEMIC CENTER - A

ACADEMIC CENTER - B





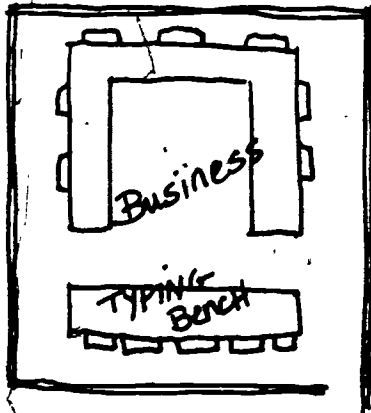
**SCIENCE WORKSHOPS  
MAY EXPAND WITH ENROLLMENT**

### Skills Area Workshops

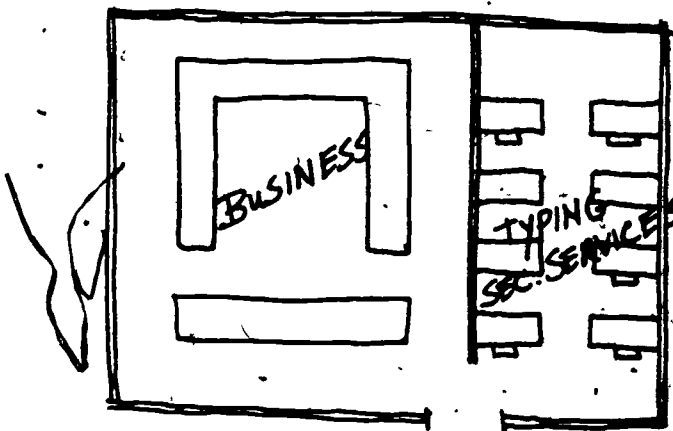
Skills area workshops have been imperically selected and grouped according to the probability of their being desired in the program. Each of these have been tested in plan form to determine its suitability to conduct a program with an assumed number of students. The ultimate utilization of the allocated space will, however, be determined by the ingenuity of the Architect and community in making multiple use of spaces, and of the faculty in developing effective programs which are compatible within the space.



BUSINESS - A



BUSINESS - B

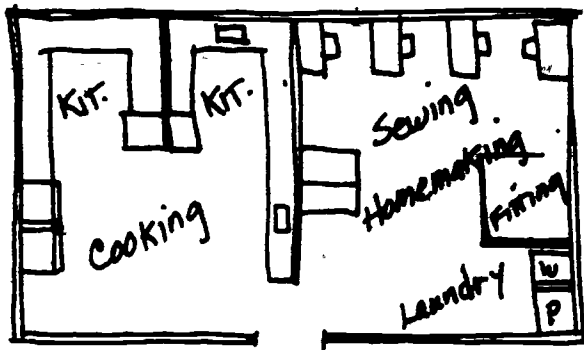


BUSINESS - C

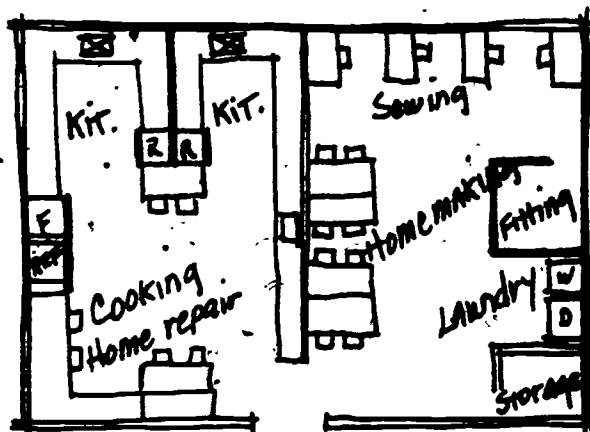




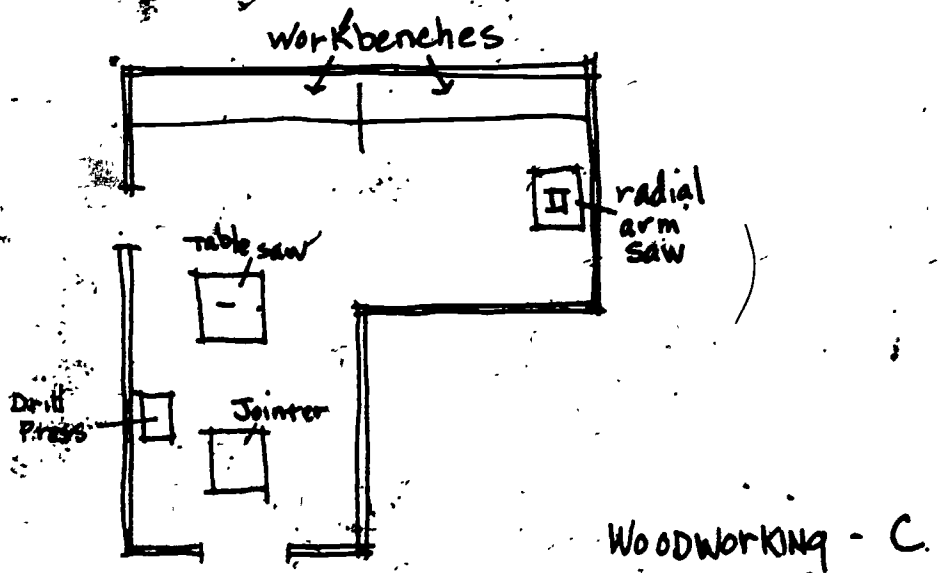
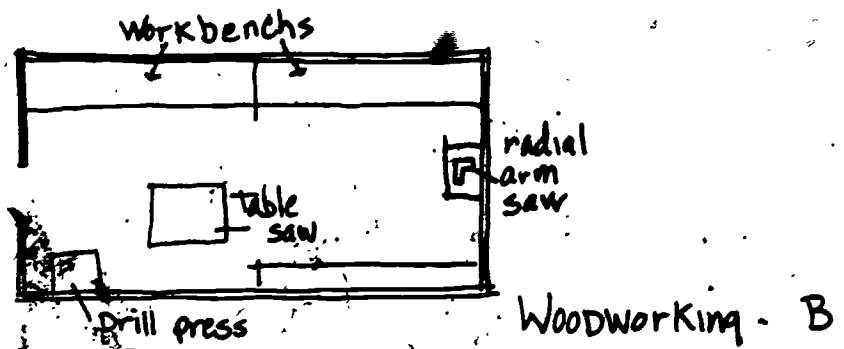
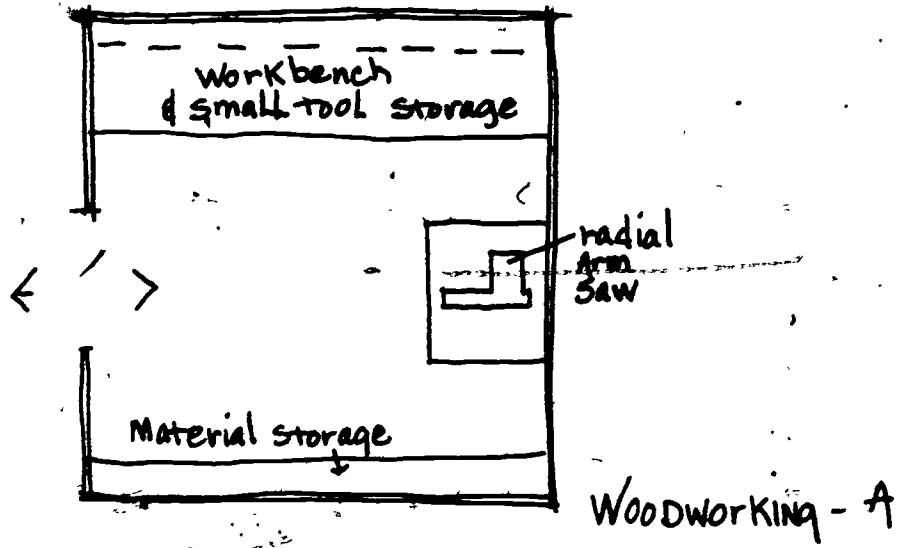
Homelife - A

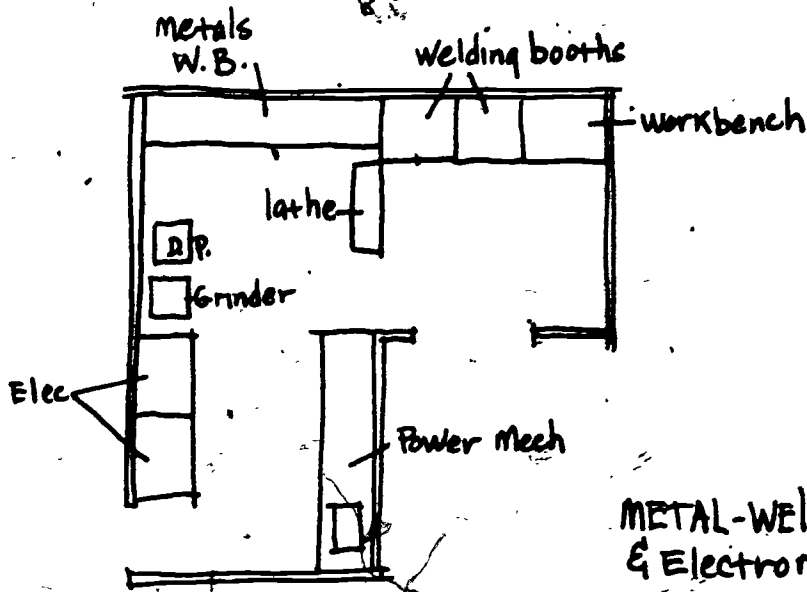


Homelife - B

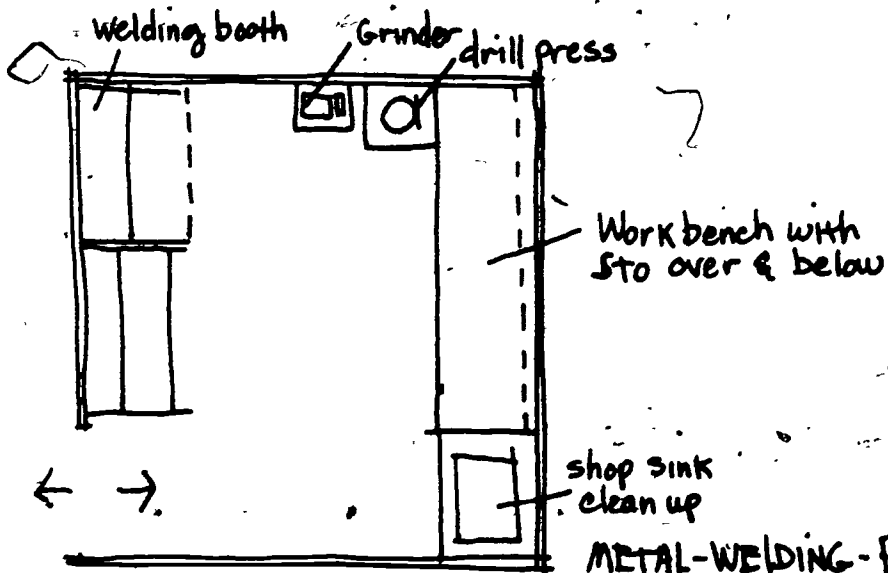


Homelife - C

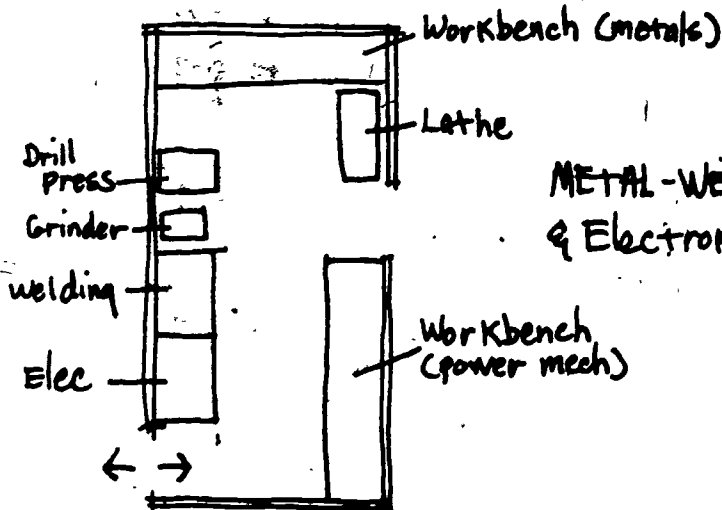




METAL-WELDING-POWER MECH & ELECTRONICS - A



METAL-WELDING-POWER MECH & ELECTRONICS - B



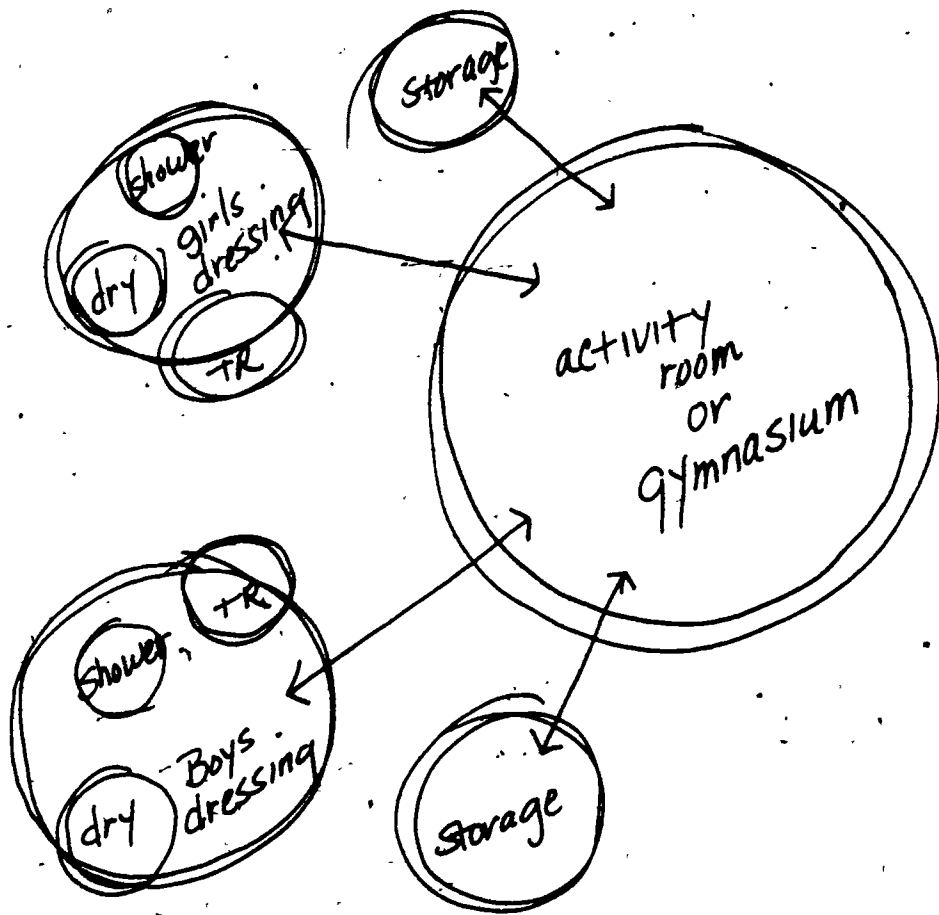
METAL-WELDING-POWER MECH & ELECTRONICS - C

### Activity Areas

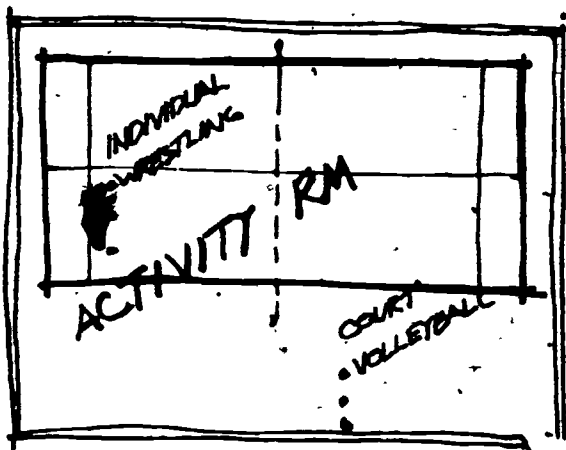
One of the more illusive needs of the small high school is of that for activity areas such as physical education, music, drama, etc. Community space may be available or existing schools may have spaces which can be used for these activities. The spaces projected for these areas are based on no other space being available and on the probable need to provide them in this facility.

The lower design enrollments do not justify full-scale facilities so, therefore, many require a selection of program which fits within the space provided. For example, an enrollment of 10-25 students does not justify the construction of a full size gymnasium. Therefore, the types of physical education activities may be limited to badminton, volleyball, etc., which may be coeducational or individual activities such as wrestling, gymnastics, or dance.

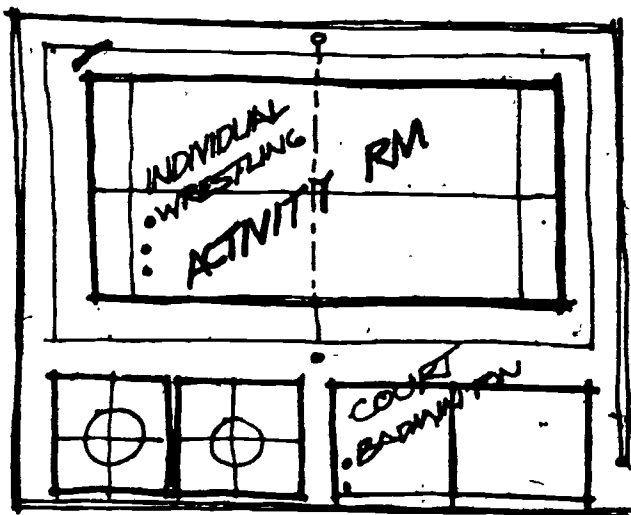
Food Service and Cafeteria needs are also questionable for the lower design enrollments. At the lower end, it may only be necessary to have a kitchen available with meals being eaten in the individual carrel area. In other cases, the activity room may be used as a cafeteria or student-form area.



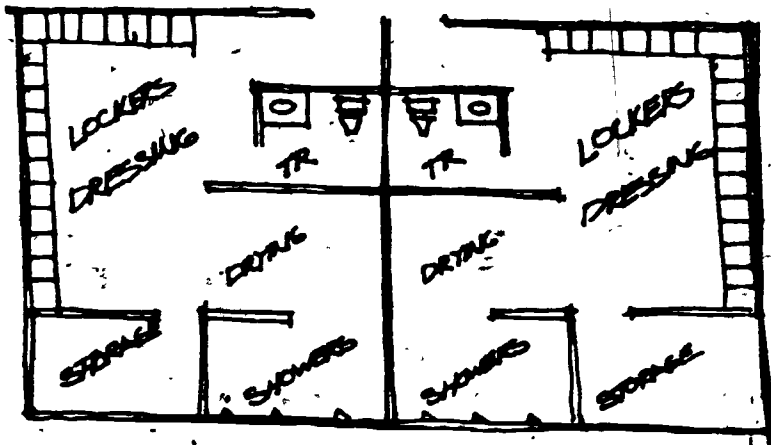
# PHYSICAL EDUCATION



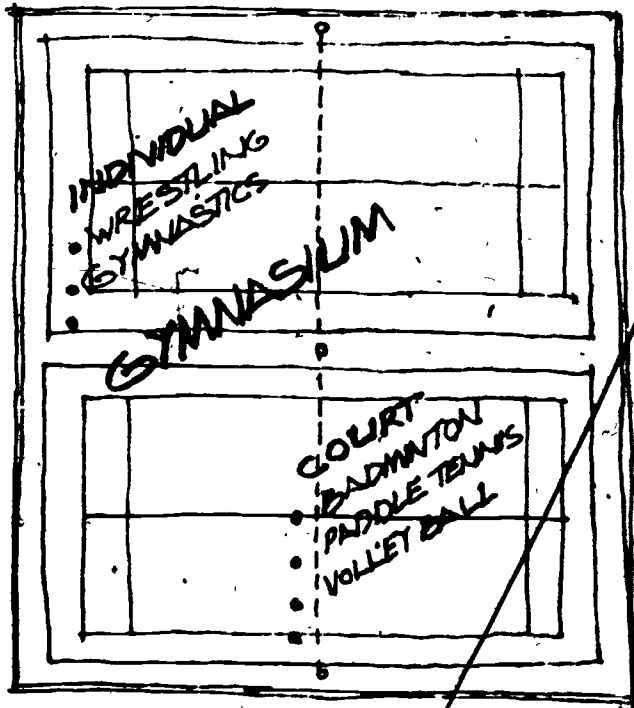
ACTIVITY RM - A



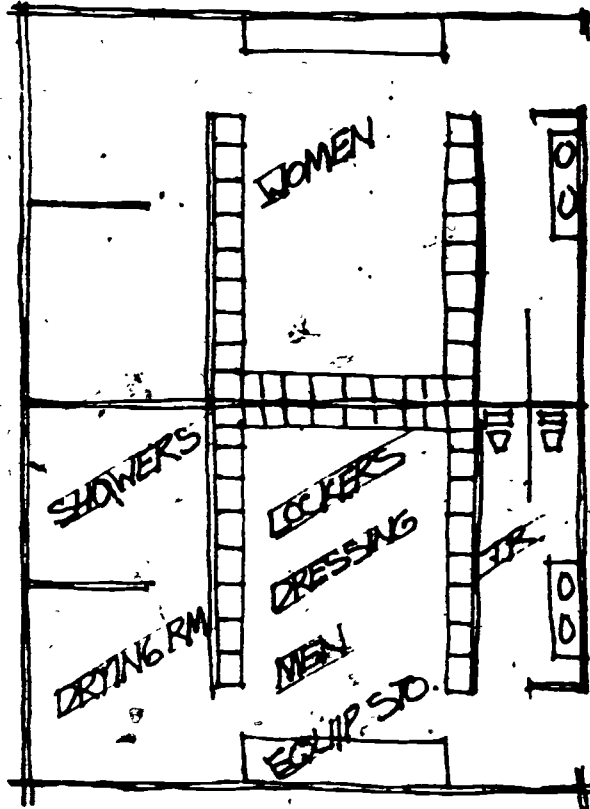
ACTIVITY RM - B



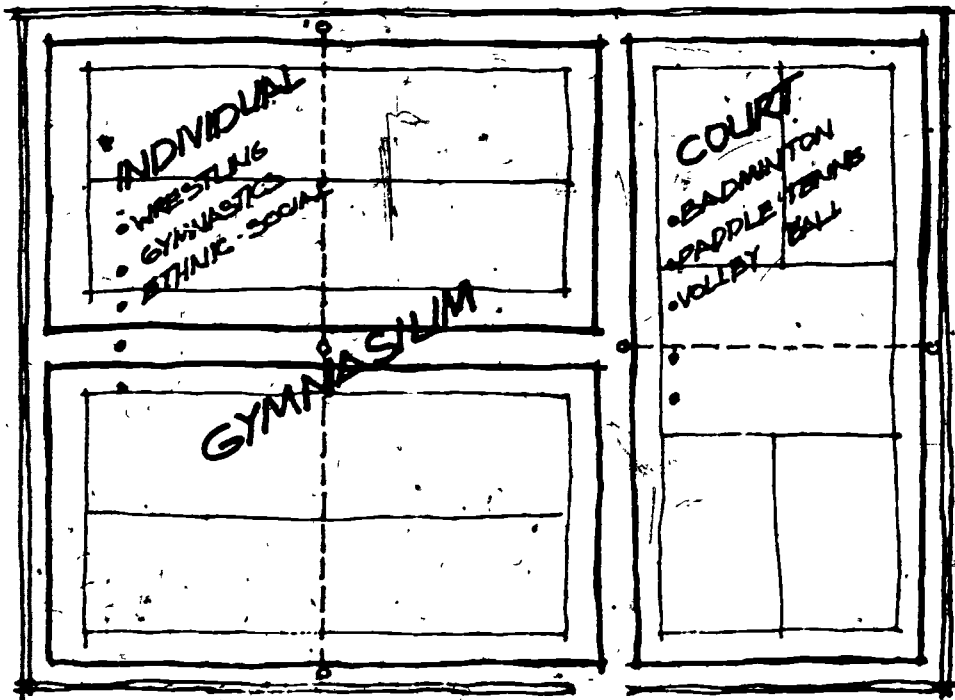
PHYSICAL ED



GYMNASIUM

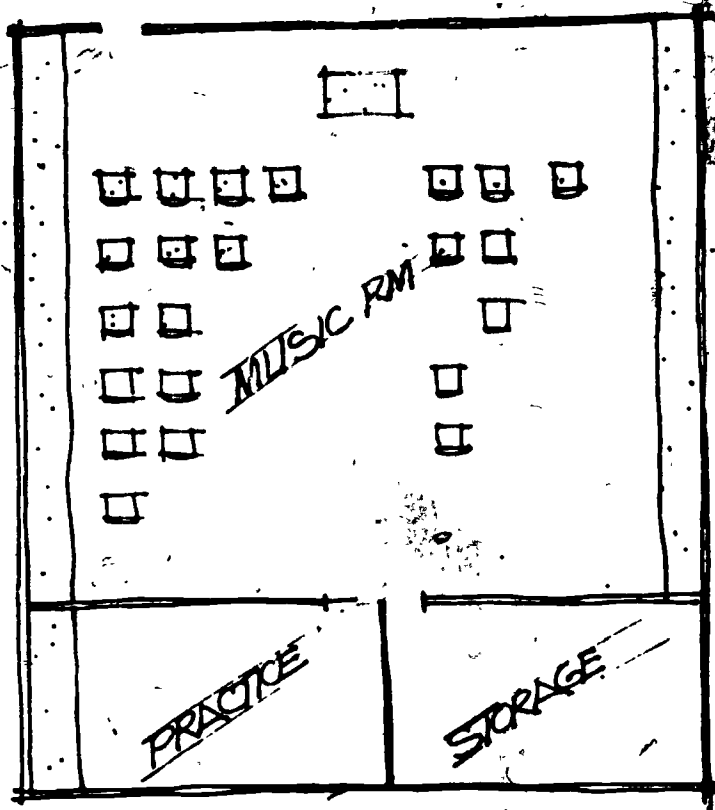


PHYSICAL ED. DRESSING RM.

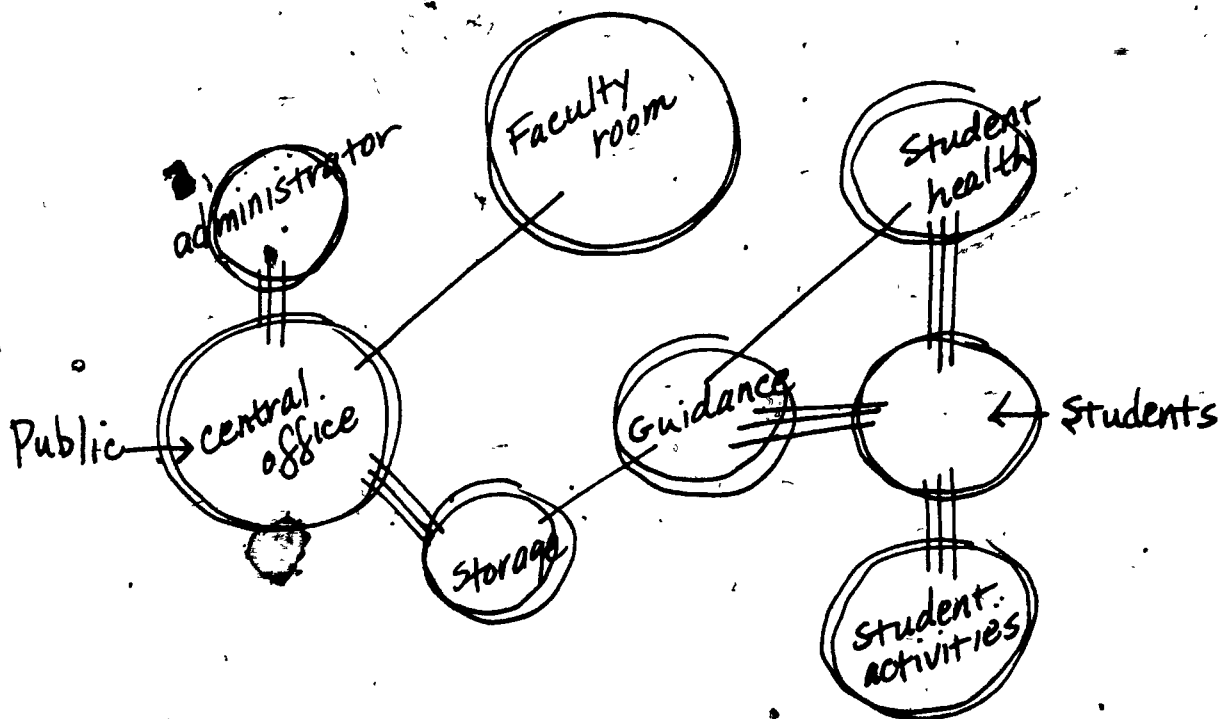


GYMNASIUM

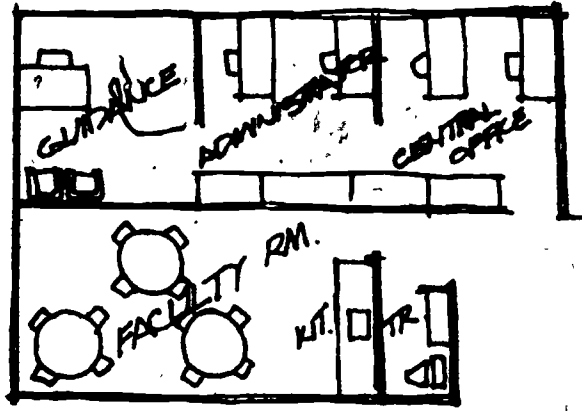




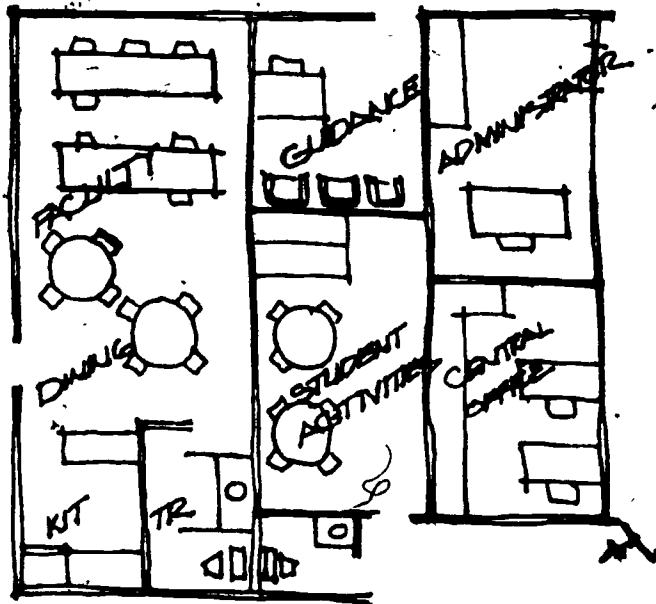
MUSIC RM / PRACTICE STD



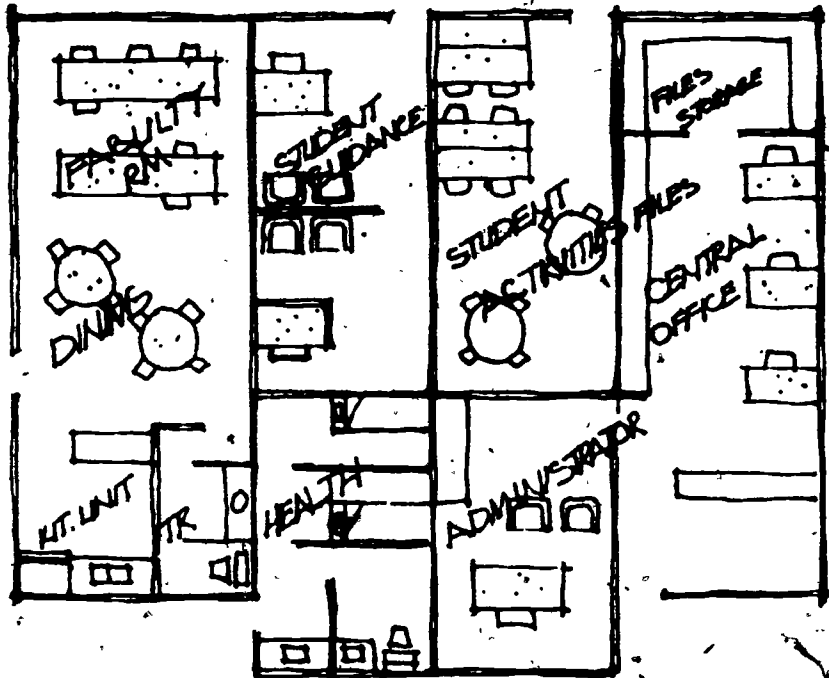
ADMINISTRATION



ADMINISTRATIVE - A



ADMINISTRATIVE - B



ADMINISTRATIVE - C

ALASKA DEPARTMENT OF EDUCATION

SECONDARY SCHOOL SPACE GUIDELINES (IN MAXIMUM GROSS SQUARE FEET OF FLOOR AREA)

	ENROLLMENT					
	10-20	21-32	33-46	47-62	63-80	81-99
CLASSROOM(S)	800 <sup>1</sup>	1200 <sup>1</sup>	1500 <sup>2</sup>	1200	1800	2400
LIBRARY/MEDIA CNTR. (% of individual study space)	900 75%	1000 70%	1100 65%	1200 60%	1300 55%	1400 50%
SCIENCE CLASSROOM	-0-	-0-	800	900	1000	1100
OFFICE	-0-	-0-	-0-	100	150	200
BUSINESS ED.	-0-	-0-	100	300	400	600
HOME SCIENCE	-0-	-0-	-0-	400	600	700
INDUSTRIAL ED.	400	600	800	1000	1200	1500
MULTI-PURPOSE SPACE	1200	2000	2500	4200	4500	5000
SUPPLEMENTARY SPACE*	1155(35%)	1680(35%)	2000(30%)	2700(30%)	3285(30%)	3225(25%)
TOTAL	4455	6480	8800	11840	14235	16125

1 Include wet area for science/home economics.

2 Include wet area for home economics.

\* Includes restrooms, storage, hallways, wall thickness, kitchens, and mechanical space. Restrooms for 20 or more should include at least one shower stall. Provisions for washer and dryer for towels should also be considered.

ALASKA DEPARTMENT OF EDUCATION

COMBINED ELEM./SEC. SCHOOL SPACE GUIDELINES (IN MAXIMUM GROSS SQUARE FEET OF FLOOR AREA)

(TO BE USED IN PLACE OF STANDARDS IN SEPARATE ELEM. & SEC. CHARTS)

	ENROLLMENT					
	10-20	21-32	33-46	47-62	63-80	81-99
ELEMENTARY CLASSROOM(S)	900 <sup>1</sup>	1800	2400	3000	3600	4200
SECONDARY CLASSROOM(S)	800 <sup>1</sup>	1200 <sup>1</sup>	1500 <sup>2</sup>	1200	1800	2400
LIBRARY/MEDIA* (% of individual study space)	1000 75%	1100 70%	1200 65%	1300 60%	1400 55%	1500 50%
SCIENCE CLASSROOM	-0-	-0-	800	900	1000	1100
INDUSTRIAL ED.	400	600	800	1000	1200	1500
BUSINESS ED.	-0-	-0-	100	300	400	600
HOME SCIENCE	-0-	-0-	-0-	400	600	700
MULTI-PURPOSE SPACE*	1500	2500	3500	4200	4500	5000
SUPPLEMENTARY SPACE*	35%	35%	30%	30%	30%	25%

\*COMPUTED ON BASIS OF COMBINED ELEMENTARY AND SECONDARY ENROLLMENT.

1 Include wet area for science/home economics.

2 Include wet area for home economics.

DESIGN ENROLLMENT

AREA: SITE SIZES

10-25

26-50

50-75

76-100

101-200

201-300

301-400

401-500

Secondary School  
Sites-separate  
from Elementary

3-6 acres

4-8 acres

5-10 acres

6-12 acres

7-15 acres

10-20 acres

15-25 acres

18-30 acres

Combined Elementary  
Secondary Sites

5-8 acres

6-10 acres

7-15 acres

8-18 acres

10-20 acres

15-25 acres

17-30 acres

20-35 acres

1. Larger sites may be acceptable.

**COMPARING RURAL ALASKAN SCHOOL SITES**  
 (Alternate to form F-11, CEFP Guideline)

Weigh each factor on a scale of 1 (poor) to 10 (excellent)	Site 1	Site 2	Site 3	Site 4
Program Support				
Ease of Acquisition				
Cost of Site Development (topography, access, drainage)				
Cost of Utilities Extension				
Environmental Quality (includes aesthetics & flora and fauna)				
Location & Centrality to Student Population				
Ease of Expansion				
Relative Safety				
Security				
Shape and Adequate Size of Site				
Relationship to Other School Facilities				