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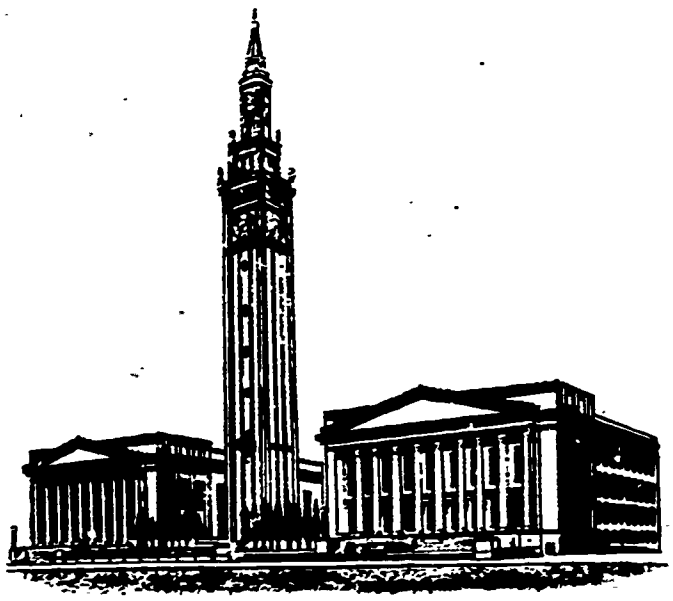
Presented is a plan for a community school in the North End-Brightwood area of Springfield, Massachusetts. The commitment to the community school concept is stated and the objectives are defined. The document contains chapters on pupil characteristics and grouping, special classes, reporting pupil progress, and teacher utilization and characteristics. Also included are sections on the use of nonprofessionals, the psychological services personnel, the expanded classroom concept, curriculum, technology, community services, administration, and educational specifications. (NH)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

PLANNING FOR AN URBAN COMMUNITY SCHOOL



PUBLIC SCHOOLS, SPRINGFIELD, MASSACHUSETTS

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SPRINGFIELD, MASSACHUSETTS

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July 1968

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FOREWORD

This report is respectfully submitted by the Planning Committee for the North End-Brightwood Community School to the Springfield School Committee for its consideration. The recommendations and suggestions contained in this report represent not only the combined thoughts of the fourteen principals and teachers on the planning committee, but also the cooperation, efforts, and advice of many individuals and agencies within the community.

The planning process involved the development of criteria representative of the Committee's philosophy of education; an evaluation of present educational practices; a survey of research, current practice, and community opinion; and finally the development of programs which represent an amalgamation of all of the above in relation to the needs of this particular community. In general, the format of this report follows the same pattern.

TABLES

INTRODUCTION

It has become increasingly evident, particularly during the past ten to fifteen years, that the United States is rapidly becoming a predominantly urban society. People in ever increasing numbers are migrating to the metropolitan areas. This fact coupled with better health and higher birth rates have led to predictions that by the year two thousand eighty to ninety percent of the population in the United States will live in huge megalopoles.

One significant reason for this trend has been the relatively rapid change from agricultural predomination to industrialization. From 1800 to 1960, the percentage of the labor force engaged in agriculture was reduced from eighty to eight percent. Concurrently, urbanization increased during the same period from six to seventy percent.[1] The importance of this change for education lies in the fact that currently two third of our school children and teachers are located in metropolitan areas. The increase in industrialization is, of course, only one reason among many for the increase in the urban population. However, it is undoubtedly the most important.

The sheer number of children alone makes it obvious that the major educational problems of the twentieth century are to be found in the metropolitan areas and particularly within the geographic boundaries of the "inner-city". The problem of large school

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[1] Robert J. Havighurst, Education in Metropolitan Areas, Allyn and Bacon, Boston, 1966, 260 pp., p. 28.

populations is minor, however, when compared to the concurrent problems for education brought on by poverty, racial tension, and lack of opportunity for the unskilled and uneducated. In the inner city, deterioration both physical in terms of environment, and mental and social in terms of its people, further complicates education's attempt to meet the challenge. However, in spite of the obstacles, the school can and should be one of the major instruments for providing the community with the means for solving these problems effectively. In fact, in some cases, the school may be the only agency which offers any hope of success.

CHAPTER I

THE NORTH END -BRIGHTWOOD COMMUNITY OF SPRINGFIELD

Robert Havighurst[2] describes the process of metropolitan evolution as taking place in five stages:

Stage I is represented by a small town up to fifty thousand or so which is, in effect, a small trading center. It has its "better" area and a slum area. The school population represents the heterogeneous socio-economic background of the total community.

Stage II occurs as the city develops industries which attract large numbers of people who come there to work. The areas near the center become industrialized, larger slum areas develop, and choice residential areas appear on the edges of the central city. The schools begin to reflect certain segments of the larger community. Some become mostly working class, some middle class, and some reflect particular ethnic groups. The single comprehensive high school gives way to a variety of schools. Some begin to specialize in preparation for college, others toward vocations.

Stage III is described as being different from previous stages in that choice residential suburbs have been established.

Stage IV is represented by a decentralization of industry with the result that there is rapid suburban growth. The workers tend to follow

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[2]Ibid., pp. 33-34.

industry and move out of the central city and thereby contribute to its impoverishment.

Stage V is represented by urban renewal. Urban renewal has two aims: to make living conditions in the central city better, and to make the central city a better place in which to live and work.[3] Havighurst describes urban renewal as consisting of "...planning the growth of the metropolitan area from the center out to the suburbs, with parks, shopping centers, libraries, churches, and schools organized to serve people near where they live; and with industry, the central business district, and the centers of residence linked by fast, comfortable transportation, public and private".[4] It is readily apparent that the city of Springfield in 1968 reflects portions of Stages III, IV, and V. Curiously enough, if one examines the environment and socio-economic composition within the geographic area to be served by the North End-Brightwood School, all elements of a city in the various stages of development can be readily identified. This microcosm has an industrial area, large working class, urban renewal, select residential area, poverty, immigrants, etc. With a few exceptions, it represents a reasonably healthy but declining area of the city.

Physical Characteristics

The North End-Brightwood community is located in the extreme northwest portion of the city as depicted on the map on the following page. It covers an area of approximately one square mile. Its boundaries are roughly the Connecticut River on the west, the Chicopee line on the

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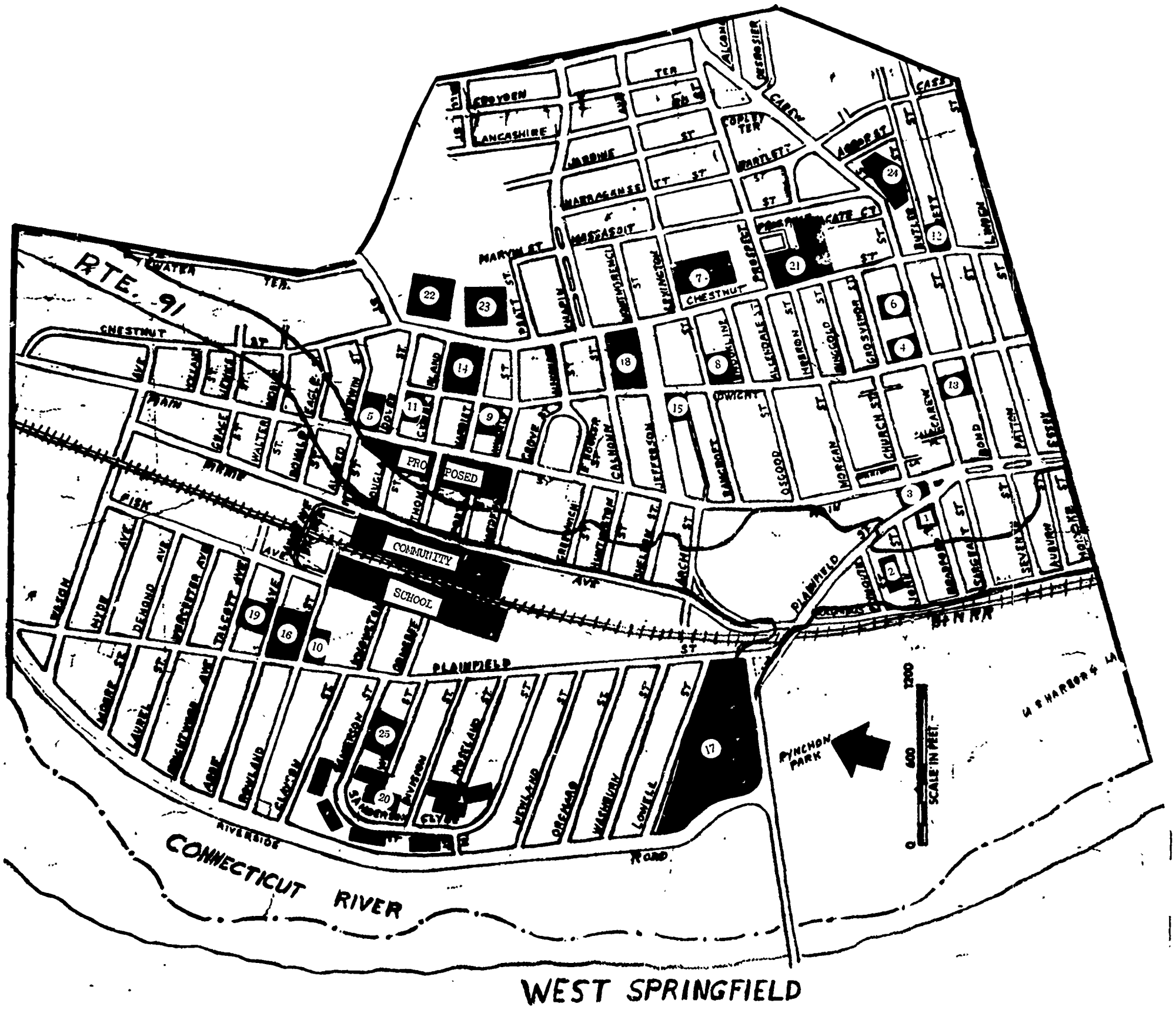
[3] Ibid., pp. 33-34.

[4] Ibid., p. 44.


RTE. 91
WATER
CHESTNUT
MAIN
GRACE
WALTER
ROMAN
EAGLE
FISK
PROPOSED
COMMUNITY
SCHOOL
PLAINFIELD
MARYLIN ST
DARTMOUTH
CHESTNUT
PROSPECT
WORTHINGTON
CHURCH ST
MORGAN
OSGOOD
DWIGHT
BOND
PYNCHON PARK
SCALE IN FEET
0
600
1200
CONNECTICUT RIVER
WEST SPRINGFIELD

LEGEND

1. Assembly of God (Spanish)
2. Mt. Calvary Baptist Church
3. St. George Greek Orthodox Memorial Church
4. Gardner Memorial Church AME Zion)
5. St. James Methodist Church
6. St. Peter and St. Paul Russian Orthodox Church
7. Beth Israel Synagogue
8. Congregation, Sons of Israel Synagogue
9. St. Thomas Church (Roman Catholic)
10. All Souls Church (Roman Catholic)
11. Blessed Sacrament Church (Roman Catholic)
12. Sacred Heart Church (Roman Catholic)
13. Carew Street School
14. Lincoln School
15. Jefferson Avenue School
16. Brightwood School
17. Fred Kenefick Playground
18. Calhoun Park
19. North End Recreation Center
20. Riverview Housing
21. Chestnut Street Junior High School
22. Springfield Hospital
23. Wesson Maternity Hospital
24. Mercy Hospital
25. Proposed swimming pool (location tentative)

north, West Street and Route 291 on the south, and Atwater Terrace and Lancashire Road on the north. The area encompasses most of census tracts five through ten.

This community has for many years been bisected by several pairs of railroad tracks which travel in a north-south direction. The only access routes to the area west of the tracks are at the extreme north and south ends and a narrow tortuous bridge spanning the track roughly at the mid-point of the area. Currently, Interstate Highway 91 is being constructed roughly parallel to these same tracks. This highway will be constructed with a twenty-two foot elevation, and, with the exception of two or three underpasses, will represent an even more effective barrier to cohesiveness between the eastern and western segments of this community.

As will be described later, these two factors, the railroad tracks and the highway, have created and will continue to create very serious obstacles for solving the problems of this segment of the city.

Presently, most of the North End-Brightwood area is residential with light industry and marginal property primarily located along the railroad. There are scattered small stores along Main Street which are particularly numerous at its north end. Health and recreational facilities in this area will be discussed in the appropriate sections later.

There are presently four public elementary schools serving this area; all are old, and due to be replaced. At the present time, these schools do not contain sufficient space to house the children in this area. Therefore, many are being transported to other city schools. One Junior High School serves the area.

There are several churches in the area representing many denominations. With the exception of St. Thomas (French) and All Souls, both

Catholic churches, the majority of the membership lives outside the geographic area of the church. Most of the pastors of these churches are concerned about dwindling attendance and support. The French parochial school connected with St. Thomas has about 300 children in grades one through eight. This school is faced with a major problem in acquiring teaching personnel. The expense of maintenance also presents a serious difficulty. If these problems prove insurmountable, it may be necessary to close this school in the near future.

Housing

Although there is a multiplicity of housing types to be found within the total geographic area, certain types and conditions seem to predominate in parts of this area. To the west of the railroad tracks are many one, two, and three family units which are for the most part in the beginning stages of deterioration. There are a few relatively new small homes also located here. A large complex of high rise public housing units are located near the river. Many of the current disadvantages listed for this area by the Community Renewal Program Staff are expected to be alleviated either directly or indirectly through urban renewal efforts. Some of the disadvantages listed are: a lack of adequate recreational space, sub-standard housing, unsightly industrial areas, lack of convenience to stores, and dangerous intersections.[5]

The housing along Main Street is limited to several older apartment buildings. The apartment buildings and houses in the Memorial Square area tend to be in a more advanced state of deterioration. In

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[5]Springfield Community Renewal Program Neighborhood Analysis - Brightwood, Planning Department, July 1966, 40 pp., p. 20-22.

general, the housing from Main Street east is represented by one and two family residences in reasonably good condition. There are some exceptions on a few streets in this area, particularly on those just north of Carew Street. As one moves east from Main Street, the single family, middle income housing begins to predominate.

Population

It is difficult to determine with any exactitude the total number of persons living within the North End-Brightwood area because of a lack of up-to-date information. However, it would appear that an estimate of 20,000 would not be unreasonable. Figures taken from the population study done as part of community urban renewal are projected to be 19,730 in 1970.[6]

The population is rather evenly distributed throughout the area, with the exception of the Riverview Apartments. Nearly 2,000 people live in this complex. An analysis of residents in the spring of 1968 showed that there were 277 families. Of these families, 160 were Negro, 108 were Puerto Rican, and nine were white. Thirty-one of these families were elderly. Seventy-one apartments were empty. This appears incongruous in a city which has a housing shortage, particularly of low cost housing. The answer lies in the negative image city residents have of this complex. Many residents of Riverview say they live there because there is no place else to go. To many Negroes in the North End, a move to the "Hill" area improves status, even though the new living facilities are much poorer. A survey done by personnel from the University of Massachusetts School of Nursing provides some interesting data

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[6]Barton Goldberg, "Community Renewal Program," Population, Springfield Planning Department, 1965, p. 120.

with regard to Riverview residents: of 216 families interviewed, fifty percent were one parent families; there was an average of four children per family; forty-three percent of the 821 children were six years or younger; seventy percent of the parents did not complete high school; and seventy-five percent had no family physician.[7]

The socio-economic range of the population in the total North End-Brightwood area runs from very low to high with the greatest preponderance of people in the low to low-middle range. Census tract five (area east of Main Street) is composed mainly of fairly stable families in the low to middle income range. There is a large group of French-Canadians clustered around St. Thomas Parochial School. There are also fairly well defined groups of Irish, Russian, Polish, and others. There are very few Negroes in this tract.

The highest concentrations of Negroes are to be found in the Riverview Apartments and in the area between Main and Chestnut Streets just north of Memorial Square. Although almost all of Springfield's 3,000 Puerto Ricans are located throughout the North End-Brightwood area, most are clustered around Memorial Square and Main Street, just north of the Square. There are many families in Riverview. Both the Spanish and French speaking groups pose a serious language problem for the public schools in the area.

Some of the common problems to be found in most of the North End-Brightwood area have been stated in the Neighborhood Analyses of the Springfield Renewal Plan. Listing a few of these difficulties may help

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[7]Constance Petrunenko, Included in the agenda of a meeting held by a committee planning a health program in Riverview, September 26, 1967.

to present more effectively the needs and challenges reflected in this section of the city:

1. Poverty level living by more than one-third of families
2. High unemployment rate
3. Illiteracy
4. Large number of school "drop-outs"
5. Juvenile delinquency
6. Great amount of sub-standard dwellings
7. Severe health problems

A sizeable portion of the children from this area could be called "disadvantaged" by any standard form of measurement.

Some of the assets of this area include:

1. Location near downtown.
2. Location near Routes 291, 91 and 5.
3. Good bus service.
4. A sizeable number of stable family units.
5. A majority of housing in fair to good condition.
6. Positive "inputs" planned through urban renewal.

Implications and Conclusions

The North End-Brightwood section of the city previously described represents a major portion of Springfield which has begun to decline both physically and in terms of the socio-economic level of the persons living within its boundaries. At the same time it has sufficient assets, in terms of both property and people, that further deterioration must not be permitted. Its strengths must be capitalized on, and its problems alleviated. It is expected that this can come about, and

that the North End-Brightwood School will play a large part along with the residents of the area in providing impetus to the process.

CHAPTER II

THE COMMUNITY SCHOOL

Historical Perspective

Some educational historians attribute the beginnings of the concept of the community school to Ancient Greece and Rome. Naslund attributes the beginning of the community school "in the modern manner" to Fellenberg in schools established on his estate in Switzerland in the 1800's.[8] In these schools, the community became the prime source of curriculum material. For the first time, the school was deliberately used to improve life in the community it served. Its focus was vocational.

Although Naslund attributes the beginnings of the community school concept in the United States to such men as Barnard and Dewey, their emphasis appeared to relate only to one aspect of what we now interpret as a community school. This approach revolved around the idea that society can ultimately be improved by improving its children.

According to Naslund the first significant use of the school as a civic center appears to be credited to Rochester, New York in

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[8]Robert Albert Naslund, The Origin and Development of the Community School Concept, Unpublished Doctoral Dissertation, Stanford University, 1951, p. 109.

1907.[9] The aims of its program were reported to be:

1. The school is the logical center of the precinct, just as the city hall is the center of the city, and the capital is the logical center of the State and Nation. The school should, therefore, be the polling place of the precinct.

2. It is a place for deliberation and provides an opportunity for the people to discuss in a friendly manner the problems vital to their community.

3. It is the place for the Voters' League which should unite the people for civic improvement.

4. The place for public lecture courses for the education of the people.

5. The place for the branch public library, thus extending the benefits of the public library into every neighborhood in the city.

6. The place for public art exhibitions, thus cultivating the aesthetic taste of the people.

7. Music centers, providing concerts by high grade talent and furnishing an opportunity for local musicians to entertain.

8. The festival center--a logical place in which to celebrate the national holidays for the inspiration of patriotism and community interest.

9. A recreation center, providing dances, gymnastics, and games, and the organization of clubs.

10. A place for all the people of the community to become acquainted.

The community school concept received additional impetus throughout the "thirties" and "forties" due to the emergence of the "All-Day Neighborhood Schools" in New York City and the community schools developed in Flint, Michigan with the help of the Mott Foundation. The Mott Program appears to have been concerned primarily with education and recreation programs for all age groups in the community,

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[9] Ibid., p. 147.

day and evening, throughout the year. More recently they appear to be expanding to other areas of need within the community. The Flint Community School Directors' Training Guide reflects this in a statement attributed to Elsie R. Clapp in defining the community school:

> First of all, it meets as best it can, and with everyone's help, the urgent needs of the people, for it holds that everything that affects the welfare of the children and their families is its concern. Where does school end and life outside begin? There is no distinction between them. A community school is a used place, a place used freely and informally for all the needs of living and learning. It is, in effect, the place where learning and living converge.[10]

The All-Day Neighborhood Schools operate from 9:00 A.M. to 5:00 P.M. during the school year. Its areas of concern emcompass augmenting the on-going instructional program during the day, and having related club and instructional activities after school in the afternoon. These schools also place considerable emphasis on community contact and involvement through local and city-wide citizens' committees. The basic philosophy of the ADNS Program is stated as "...a partnership of home, school, and community working together for a better society...."[11]

In the early 1960's, Puerto Rico embarked on an ambitious program to improve living conditions and education primarily in rural communities through the medium of the local schools. The objectives of this program included: coordination of services of various

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[10]Elsie R. Clapp, Community Schools in Action, New York; The Viking Press, 1939, p. 89, quoted in Community Schools Directors' Training Guide, Mott Program Division, Flint, Michigan, p. 1.

[11]Curriculum Bulletin 1965-66 Series, No. 19, Extended School Services Through the All-Day Neighborhood Schools, Board of Education of the City of New York.

governmental agencies; consideration of community in planning school work, and development of the school as the center for civic education activities. Particular emphasis was placed on helping communities. Nearly 105,000 families were involved in this effort to help themselves by developing indigenous community leadership during 1962-63.

The community school concept was officially accepted by the New Haven Board of Education in 1962 as part of a comprehensive program of community revitalization. The seven community schools in New Haven not only are educational centers but also serve as neighborhood centers for recreation and leisure time activities. Goglia, Director of Community Schools, reports that the four functions of the community school as defined by the Board of Education are:

1. an educational center
2. a neighborhood community center for cultural and recreational activities
3. a center for social services
4. a center for neighborhood group meetings and community life (social clubs, political organizations, civic service groups) [12]

They also function to some extent as coordination and referral agencies for some social services. There have been recent efforts to utilize the schools as centers for social action. The Conte School is the only school specifically designed to be a community school and includes a public library and a building for adult use.

Community School Concept

The evolution of the community school idea has proceeded from

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[12] Ralph M. Goglia, The Community School Program in New Haven, New Haven Board of Education, 1967, p. 1.

vocational training, through its use as a civic center to a concept which encompasses nearly every aspect of community life.

The latter concept is relatively new. The 1960 edition of the Encyclopedia of Educational Research devotes only a page to the community school, and this in the context of rural education.[13] Havighurst compares conventional and community school philosophy when he says:

> There are two opposite schools of thought among educators concerning the conduct in public schools in the big city. One may be called the "four walls" school. The basic principle is to do the best possible job in educating every boy or girl who comes into the school whoever he is, whatever his color, nationality, I.Q., or handicap. This means building good school buildings, equipping them well, staffing them with well trained teachers.....
>
> The "four walls"type of school system works for efficiency and economy, and attempts to free the creative teacher to do the best possible job of teaching under good conditions. The community outside the school is regarded as a source of complexity and of tension arousal if the boundary between the community and school is not clearly defined and respected.
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> The other school of thought may be called "the urban community" school. The educators who advocate this believe that the big city is in a crisis which...requires the active participation of schools in the making and practicing of policy for social urban renewal. This big city crisis is reflected in feelings of uncertainty and anxiety on the part of parents and citizens. There is danger of collective failure of nerve which saps the vitality and flexibility of the city's efforts at urban renewal.....
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> The urban community school attempts to act constructively in this crisis by involving the parents and citizens in the decisions about school policy and practice. The educator accepts the frustrations of working with people who themselves are confused and uncertain about

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[13] Shirley Cooper, Howard A. Dawson, and Robert Isenberg, "Rural Education," in The Encyclopedia of Educational Research, Ed. Chester W. Harris, Third Edition, MacMillan, 1960, pp. 1175-1176.

> the schools, believing that the only way to solve the problems of the city is to work on a give and take basis with citizens and community organizations.[14]

Also according to Havighurst:

> The school must become one of the prime agencies for preserving and stabilizing neighborhoods, functioning as a magnet to hold and draw back the white middle and upper classes, and as an instrument--perhaps the instrument to preserve and restore the city. In such a conception, the school becomes not only a social agency, it becomes the keystone, the essence of the community itself.[15]

This point of view defines the responsibility of the community school far in excess of its conventional educational role. One suspects that to judge a school's success on its effectiveness in preserving and restoring the city is unrealistic and unfair. However, there is no question on the part of the committee that the community school can be an important agency for social change and has a responsibility for leadership in this area which cannot be minimized.

Naslund defines the community school as:

> A school which over and above its concern for the production of literate, "right-minded" and economically efficient citizens in terms of a particular social, economic, or political setting is directly concerned with improving living in the community in all the broad meaning of that concept in the local, state, regional, national or international community. To that end it is the consciously used instrument of the community, and its curriculum reflects phases as circumstances indicate. Its buildings and physical facilities are at once a center for both youth and adults who together are actively engaged in analyzing problems and solutions which are in turn put into operation to the end that

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[14] Robert J. Havighurst, The Public Schools of Chicago, Chicago Board of Education, Chicago, 1964, Reported by Peter Schrag in Voices in the Classroom, Beacon Press, Boston, 1965, p. 58.

[15] Ibid., p. 59.

living is improved and enriched for the individual and community.[16]

His suggested "implementing criteria" describe its function:

1. The school is organized and administered in a way which would further actions in the light of the commonly accepted beliefs and goals of the society in which it operates.

2. Community members and school personnel cooperatively determine the school's role in attacking problems and thus plan its curriculum.

3. Community members and school personnel alike function in seeking out community problems for study and serve cooperatively in sensitizing the community to them.

4. The community school is but one of many agencies, independently attacking some problems, serving as a coordinating agency in other situations, and serving as a team member under the direction of a community coordinating agency in still other circumstances.

5. The community school uses the unique experiences of all community members and agencies as each is able to contribute to the program of the school and, in turn, is used by them as it can contribute to their efforts, all in the common cause of community betterment.

6. The community school is most closely oriented to the neighborhood and home community, but solutions to local problems are sought, not only in relation to local goals and desires, but also in the light of the goals and desires of each wider community.[17]

Conclusions

Although each proponent for the modern community school defines its concepts and functions somewhat differently, there are several common elements with which the Committee is in agreement. These common elements stated or inferred are perceived as follows:

1. Recognition that the public school can and should be

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[16] Naslund, loc. cit., p. 70.

[17] Ibid., pp. 96-99.

a dynamic agency for social change.

2. The school, with other agencies, has a responsibility to provide and train leadership within the community to implement effective change.
3. The problems of the community are all interrelated and must be approached comprehensively to be effectively overcome.
4. Multi-agency commitment, coordination, and cooperation are indispensible factors in any comprehensive plan.
5. The school must concern itself with the community needs which revolve around education, recreation, health, and social services.

The committee sees the North End-Brightwood Community School as a bold, new, creative approach to meeting this community's needs; a school which serves as an educational institution; a coordinator of services; a catalyst for healthy community growth; and finally, a school which through its sensitivity to the people it serves, becomes the nucleus for an ever improving way of life for all.

CHAPTER III

POSITION STATEMENTS

Determining and defining the community school concept as perceived by the Planning Committee members represented a major, initial step in the planning process. Important as it was, however, the Committee believed that what happened within the school and the community was of even greater importance. Determination of the school and community program required that the Committee define what it believed to be the major objectives to be achieved. The end result of many discussions is represented by a series of Committee position statements which served as the guidelines for all Committee decisions. These position statements are not based upon "hard" research, but rather on the intuition, collective knowledge, and experience of this group of educators. That these statements also reflect the philosophy of the Springfield School System, is self-evident. That they will eventually be proved by research to be valid, remains to be seem. What is significant is that, at this point in time, this group of planners believes them to be basic to planning the program of the North End-Brightwood School.

Position Statements

---Each child is a unique constellation of:

abilities
interests
needs

attitudes
learning style
growth and development patterns
learning rates

---The school must develop a positive self-image in each child.

---Success is the indispensible ingredient for fostering a positive self-image.

---It is essential that a child be provided with curricular experiences which will insure success and continuous, differentiated progress through flexibility of program and variety of approach.

---Curriculum areas should be correlated and relevant to each child and with each other.

---It is imperative that the program be planned to guarantee each child a multitude of opportunities to make independent judgements and decisions within the framework of a democratic environment.

---There must be provision for a close counseling relationship between each child and a teacher.

---The most effective organization provides opportunities for teachers to capitalize on their areas of interest and competence.

---The Community School concept provides opportunities for an effective school-community partnership for meeting community needs.

---The school must act as one of the prime agencies for social change.

The remaining portion of this report will deal specifically with such areas as curriculum, staff, utilization, and community services.

In nearly every case, the Committee's conclusions will be preceded by a brief historical orientation, a survey of pertinent research and practice when available, and some discussion of the basis for the ultimate conclusions. The Committee believes its recommendations are consistent with the above position statements.

CHAPTER IV

PUPIL CHARACTERISTICS

The children who will attend the North End-Brightwood School will be as varied socially, culturally, mentally, physically, and emotionally as the previous description of their environment suggests. A group of one hundred fourth, fifth, and sixth grade children selected at random from Lincoln, Brightwood, and Carew Street schools show a measured I.Q. range from seventy-three to one hundred twenty-seven, an achievement range grade equivalence in reading from 1.6 to 8.0, and a range in arithmetic from 2.0 to 7.8. This group has children from every socio-economic level, although the largest percentages are in the low to low-middle class range. About twenty-five percent each are Puerto Rican and Negro. The remainder includes a great variety of different cultural groups. Since more than fifty percent of this group of children could be considered to be "disadvantaged" (for lack of a better term) in one or more areas by any standard of measurement, it appears desirable to devote the remainder of this section to a discussion of the disadvantaged.

The Disadvantaged Child

National attention has been focused on the disadvantaged for the past several years. Volumes have been written; hundreds of experimental studies have been pursued; and millions of dollars from local, state, and

federal sources have been utilized in attempts to, first understand the problems of the disadvantaged, and second, to search for effective ways to break the cycle of poverty, both economically and educationally. The major thrust has been on education, whether it be children in the classroom, or the help given to adults to acquire new employment skills. It is generally believed that the blight of poverty can best be eliminated by insuring that each child reach his full skill potential academically, socially, physically, and emotionally. There appear to be two basic factors which have prevented a full realization of this goal for the disadvantaged.

First, the average teacher is middle class oriented and subscribes to, and is familiar with a life style which is alien to that of the low socio-economic milieu. For instance, the following are characteristics of middle-class family life, and according to Crow[18] are the antithesis of the typical poverty family.

1. They show greater affection and warmth toward their children.
2. There are fewer quarrels between mothers and fathers over child-rearing practices.
3. There is less use of physical punishment in discipline.
4. The parents encourage their children toward school achievement.
5. Children are encouraged to be neat and clean.
6. Children are encouraged to be self-reliant.
7. Children receive praise for good behavior.
8. Parents display affection toward each other.
9. The value of an education is emphasized.
10. Parent-child interacting experiences are provided.

Not only are the life styles of the poverty and middle class alien to each other, they are often in conflict. This conflict frequently gives rise to misunderstandings and frustration in the classroom, usually

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[18]Lester D. Crow, Walter I. Murray and Hugh H. Smythe, Educating the Culturally Disadvantaged Child, MacKay Co., Inc., New York, 1966, pp. 24-25.

to the detriment of the disadvantaged child's self-concepts and aspirations. The value conflicts which occur often leave the teacher and child with negative feelings toward each other. The resultant behavior tends to compound these negative feelings. Ignorance, then, of the child's environment, his life style within that environment, and insistance that he live by middle class standards and values have been a significant deterrent to his optimum education.

The second factor revolves around the inability, at education's present stage of development, to definitively and comprehensively determine a child's strengths and weaknesses and to follow through with materials, techniques, and content which are appropriate for his learning style, interests, and environmental orientation. This is, of course, related to the previous factor. Until recently, the educator's usual approach has been to provide additional conventional materials in greater variety, presented in a conventional manner, with conventional objectives. That this hasn't been as effective as desired is evident and a source of frustration to concerned educators.

The picture is not all bleak, however. Massive efforts in all areas, at all levels, throughout the country are being made to resolve these problems. Gaining an understanding of the disadvantaged child has taken priority.

Characteristics of the Disadvantaged Child

As with any other group of young people, educationally deprived children differ from one another. Each child is an individual, with individual characteristics. But when these children are considered as a group, certain characteristics are discernible. Testimony printed in the Senate hearings indicates what the characteristics and needs of education-

ally deprived children are likely to be.

From the point of view of the teacher, the characteristics of educationally deprived children are:

1. Lack of response to conventional classroom approaches.
2. Inadequate performance in communication skills.
3. Socially unacceptable behavior.
4. Indifference to responsibility.
5. Nonpurposeful activity.
6. Physical defects and poor health habits.
7. Exaggerated importance of status symbols.

Some of the other characteristics attributed to the disadvantaged child are:

1. He is overage for his grade.
2. His school attendance is poor.
3. He has a high rate of failure.
4. He has a high dropout rate.
5. His aspiration level is low.
6. He is without kindergarten experience.
7. He has low achievement in reading and arithmetic.
8. His participation in cultural activities is negligible.
9. His potential appears to exceed what test data shows.

Most authors have emphasized the negative aspects of the disadvantaged; their weaknesses, deficits, or limitations. Riessman is the notable exception. Riessman[19] lists the following as fairly typical of the deprived child's style:

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[19]Frank Riessman, The Culturally Deprived Child, Harper & Row, New York, 1962, p. 73.

1. Physical and visual rather than aural.
2. Content-centered rather than form-centered.
3. Externally oriented rather than introspective.
4. Problem-centered rather than abstract-centered.
5. Inductive rather than deductive.
6. Spatial rather than temporal.
7. Slow, careful, patient, persevering (in areas of importance), rather than quick, clever, facile, flexible.

Gordon[20] says of Riessman's treatment of the positive characteristics:

> .....even in Reissman's treatment there is a tendency to romanticize these characteristics. This may be a more serious error than to ignore them. It is essential that we begin to identify as assets those behaviors and conditions which can be utilized and built upon for the purposes of educational improvement. It is extremely important to recognize that selective motivation, creativity, and proficiency are present in this population, and, as Riessman has consistently stressed, if we look for these characteristics in their traditional form and along traditionally academic dimensions, we shall merely insure that they not be found. These children, like others, are motivated by some factors. They show creativity in some situations. They are proficient at some tasks and under some conditions.

Reissman[21] at a later date described the disadvantaged pupil in somewhat different terms:

1. Many disadvantaged children are relatively slow in performance of intellectual tasks.
2. The disadvantaged child is typically a physical learner.
3. He learns in one line of thought and is not flexible or broad.
4. He does not easily adapt to other frames of reference, such as the teacher's and consequently he may appear slow or dull
5. Deprived children have acquired a number of attitudes and fears that militate against learning. Fear of failure is significant in this regard.
6. They do not respond well to being challenged. They

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[20]Edmond W. Gordon and Doxey A. Wilkerson, Compensatory Education for the Disadvantaged, College Entrance Examination Board, New York, 1966, pp. 19-20.

[21]Frank Riessman, Helping the Disadvantaged Pupil Learn More Easily, Prentice-Hall, New York, 1966, pp. 11-19.

are too insecure and defensive.
7. They are poor test takers.
8. The underprivileged boys place great emphasis on masculinity. He views talk, reading, and intellectualism as unmasculine - the opposite of action; he sees the school as a "prissy" place dominated by women and female values.
9. The whole learning style of the deprived is not set to respond to oral or written stimuli. These children respond much more readily to visual or physical stimuli.

One could go on and on, since each author has somewhat different viewpoints on those traits that describe the disadvantaged child. The illustrations given appear to be sufficient, however, to indicate some of the realities of the disadvantaged which must be acknowledged and evaluated if an effective educational program is to be developed. Blatt[22] makes some suggestions for teaching approaches which should complement the life styles and strengths of the disadvantaged. He suggests:

> ----More stress should be placed on learning approaches which stress action and physical involvement; such as, role playing rather than heavy reliance upon words.
> ----Special provisions should be made for children from disadvantaged backgrounds who somehow, in spite of all forms of deprivation, have emerged talented, insatiably curious, and highly capable of moving at a faster pace.
> ----More recognition should be given to the reality of the world which surrounds them....
> ----Breaking down formidable, intimidating materials such as reading materials in small type.
> ----Greater use of tape recording devices to help children hear their own speech patterns and work at correcting them through use of pre-recorded lessons.
> ----Using learning materials which make it clear that people know children exist.
> ----By establishing half-way, orientation, reception center operations in urban areas for rural and migrant children.
> ----Make greater use of Reissman's helper principle in learning and teaching; that one who has learning difficulties but still has a certain level of achievement

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[22]Burton Blatt, "A Hypothesis of Theories and Methods in Special Education, Mental Retardation, and Cultural Deprivation", Disadvantaged Child, Part I, Jerome Hellmuth, Editor, Hellmuth, Seattle, Washington, pp. 94-96.

can assist in teaching others who know less.
----Not waiting for trouble to develop, but moving in on a screening basis ahead of crystallized trouble.
----Extending the availability of the school and its resources to before and after school hours - providing places to study and prepare work or receive extra help.
----Making greater use of the child's disposition to learn through active physical means by renewed and expanded emphasis upon art and dance.
----Filling in the experience deficits which the child has, without implying in some confused and incorrect manner that he is lacking in "culture".
----Unfreezing the school structure and making greater use of ungraded elementary and secondary school approaches.

The Committee concurs with Passow[23] when he says:

> The great difference between the successful and the unsuccessful depressed area is its staff. The overall climate of the classroom and the school powerfully influences what is learned and how it is learned..... Teachers must learn to recognize strengths and positive aspects on which to build, as well as deficiencies for which to compensate.....The riddle is this: how can we educate the inner city child out of his subculture into society's mainstream-while preserving and developing his own individuality and divergency, as well as the positive elements of his culture?

The Planning Committee does not claim to have the answers, but believes that the recommendations in this report for the North End-Brightwood School point in a positive direction.

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[23] A. Harry Passow, "Education of the Culturally Deprived Child", Disadvantaged Child Part I, pp. 158-159.

CHAPTER V

PUPIL ORGANIZATION

The history of the American public schools has been marked with a variety of pupil organizational patterns. Each has its proponents and opponents. Each was intended to solve the problem that has always been present in education-large numbers of children. It was claimed that each held promise for providing for the needs of the children and the society of the time. Each left its mark on educational practices. Some such as the "graded" system had more impact than others. There are some who feel that we may have "thrown out the baby with the bath water" when we abandoned the practice of having several grades in the one room of the little red school house.

Shane lists thirty-two plans which have been or are being tried that he believes are interesting and show promise.[24] Each presents some variation in either horizontal or vertical organization.

Some of the organizational practices which gained prominence at the time of their trial are listed and briefly described to

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[24]Harold G. Shane, "Grouping in the Elementary School" in Change and Innovation in Elementary School Organization, by Maurie Hillson, Holt, Rinehart and Winston, New York, 1966, pp. 13-20.

provide historical background for further discussion.

The Joplin Plan

This is a form of organization for reducing heterogeneity. This cuts across grade lines. Children leave their regular rooms and go to other rooms for reading instruction. There might be children from grade four, five and six with common reading needs in one room, while others from these grades would be assembled in other rooms. It was claimed that greater homogeneity was attained in each reading group than could be achieved in a regular classroom.

Platoon Grouping

The Platoon School, also known as the Work-Study-Play School or the Gary Plan, was developed by Wirtz in 1900. The plan gained widespread acceptance between the two World Wars and still exists in various modified forms in many city school systems.

In this organizational plan, the school program was divided into two halves or platoons, with one half devoted to academic subjects and the other half to those activities such as manual arts, physical education, art, and music which require special facilities or laboratories. The purposes of the program were twofold: to break down the traditional academic emphasis of the elementary school by making a place for work and play-related activities; and to provide for economical use of school facilities.

The academic subjects were taught in the homeroom, and the other subjects were taught by specialists, often on a highly departmentalized basis. The grade level structure was preserved with the exception of the auditorium and gymnasium periods. With a few

exceptions, there was little emphasis upon continuous sequential learning. Though its educational emphasis is very different, the Dual Progress Plan has adopted the platoon system, and modified forms of it are common within team teaching plans, as ways of handling scheduling problems.

Dual Progress Plan

The Dual Progress Plan stands out as one of the most comprehensive and most carefully designed of organizational plans. It was developed by George D. Stoddard and his staff at New York University in cooperation with the Long Beach and Ossining, New York school systems.

In this plan, distinction is made between subjects designated as "the cultural imperatives" (English, social studies, health and physical education) and "the cultural electives" (mathematics, science, art, music, and foreign languages). The school day is divided into two halves, one half devoted to the cultural imperatives under a single teacher and the other half devoted to the cultural electives under a number of specialist teachers.

The "cultural imperatives" are offered in grade units, with sectioning according to ability at each grade level. The cultural electives are non-graded and are organized in systematic subject sequences into which the individual student is placed in accordance with his interests, ability, and performance.

The teachers of the cultural electives are subject specialists who offer their subjects on a longitudinal basis throughout the grades. Scheduling is handled by a platoon system; each homeroom

teacher has two groups, each for a half a day. The specialists receive half of the children in the school in the morning, and the other half in the afternoon, and they work together as a team to develop a schedule for each pupil in accordance with his interests and abilities.

The Winnetka Plan

The Winnetka Plan was developed around 1920. In the Winnetka Plan the curriculum was divided into two parts: "the common essentials" (the knowledge and skills needed by everyone, including most of the basic subjects); and "the group and creative activities" (literature, music, art, manual arts, physical education, and projects in many subjects).

In the "common essentials" program, the pupils worked on individual assignments at their own rate and passed tests to measure whether or not their achievement met the standards established for the successive units of work. A pupil would move on to the next unit when he passed the standard. In the remainder of the program, the emphasis was placed on self-expression and on the development of the special interests and abilities of each individual pupil without the requirement that specific standards be met.

Homeroom placement was on the basis of age and social maturity, but easy transfer was possible because progress was individual rather than by grade placement. The plan depended heavily upon the preparation of detailed, sequential curriculum materials and very little upon organized instruction.

Multiple-Track Grouping

Children with varied ability complete a given number of units at their own rates of speed. It permits some children to finish the eight years of elementary school in seven and others might take nine years. All children were given the same material but in different amounts. It was expected that all children would complete the basic requirements before leaving elementary school.

XYZ Grouping

This was similar to multi-track grouping. Children were grouped in three levels according to their abilities or assumed performance potentials. The content and its difficulty in each track was varied according to the group.

Ungraded Plans

This term describes a situation where grade levels and grade norms are abandoned. Children progress as individuals and in groups at their own individual pace without regard for artificial determination of expected minimum requirements. This particular form of vertical organization will be discussed at greater length under "Vertical Organization".

Goodlad and Rehage suggest that school organization falls into two basic categories: vertical school organization, and horizontal school organization.[25] Vertical organization of children provides for their upward mobility. Grading and nongrading are examples of

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[25]John I. Goodlad and Kenneth Rehage, "Unscrambling the Vocabulary of School Organization" in Change and Innovation in Elementary School Organization, by Maurie Hillson, Holt, Rinehart and Winston, New York, 1966, pp.6-11.

this type of organization. Horizontal organization is concerned with how children are divided among available teachers. Departmentalization, and whether children are grouped heterogeneously or homogeneously are examples of this type of organization.

Horizontal Organization

The Planning Committee has spent considerable time studying, observing, and discussing various patterns of vertical and horizontal grouping. It became clear at the outset that whether children should be grouped homogeneously or heterogeneously was an essential primary decision to be made. The Committee first looked to the research to determine direction and to establish some logical base for its ultimate conclusions.

Although the research on grouping is voluminous, and spans nearly a century, it appears to be inconclusive. Each reviewer couches his summary of the research in tentative or equivocal fashion. Passow feels that the problems of equating and synthesizing research findings stem from:

1. Variability of the studies in scope of aim and purpose.
2. Studies of inadequate numbers of students.
3. Inadequate duration of studies.
4. Inadequate matching of experimental and control groups.
5. Variability of teaching methods, curriculum, etc. among studies.
6. Use of different evaluative techniques.
7. Failure to assess the effect of grouping on teachers and administrators.
8. Differences in utilization of teachers.[26]

A recent attempt by Franseth and Koury to synthesize the research on grouping is illustrative of the typical analysis of grouping

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[26] A. Harry Passow, "The Maze of Research on Ability Grouping", Ibid., Hillson, pp. 42-46.

research.[27] Those conclusions that seem pertinent to the Committee's objectives are listed:

1. Research shows that human variability and a wide range of individual differences constitute normal phenomena. Authorities maintain that differences among children help to enrich resources for learning in the classroom. Consciously or unconsciously, children help to improve each other's opportunities for learning.
2. The research examined is too limited for more than a tentative conclusion. However, a factor of special interest in the studies available is that, on the average, achievement gains made by pupils in classrooms representing more than a normal spread of differences among children were higher than average gains made by pupils in the ability-grouped classrooms.
3. Available evidence indicates that factors other than the particular grouping methods used account for differences that may show up in achievement gains between children grouped according to ability and those grouped heterogeneously.
4. Among the most enlightening results of research is increased knowledge of the difficulties in attempting to divide children into ability groups. Except in a

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[27] Jane Franseth and Rose Koury, Survey of Research on Grouping as Related to Pupil Learning, U.S. Government Printing Office, Washington, 1966, pp. 63-64.

limited sense and for short periods of time, success in organizing children according to ability is probably an unrealistic expectation especially in the elementary school.

5. A few studies have been conducted to determine possible effects of different organizational methods on pupil progress in learning to think, on development of creativity, and development of human values, self concepts, and attitudes. Findings are inconclusive.
6. Research on teaching indicates that kinds of pupil-teacher interaction make a difference in what children learn. However, most studies in grouping do not report on the nature of pupil or teacher activities in the group situations described in the research.
7. In view of the evidence, ample opportunity for flexibility in grouping children in the elementary school seems essential in order to provide opportunities for meeting changing needs of children as well as to meet a number of different purposes.

A survey of research on grouping conducted by a staff member of the Planning Committee led to similar conclusions. Borg did a comprehensive study of 2,500 children in grades four, six, seven, eight and nine. The sample was increased to 4,000 in the second year.[28] He studied the consequences of two grouping systems over a four year period. One system involved ability grouping with the curriculum

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[28] Walter R. Borg, "Ability Grouping in the Public Schools, A Field Study", Journal of Experimental Education, Winter, 1965.

differentiated by the rate of presentation of materials. The other system represented random grouping with the curriculum differentiated by enrichment.

Borg concludes that the decision to employ ability grouping or random grouping must be based upon considerations other than achievement.

Some of the findings and conclusions related to the elementary level which appear to have significance are listed.

Over and Under Achievers

1. Ability grouped pupils were more often classified as over-achievers and less often classified as under-achievers in the ability groupings.
2. Girls tended to be over-achievers more frequently than boys in both types of groupings.

Study Habits

1. Ability grouping does not lead to better study habits for elementary pupils at any ability level.
2. Pupils in a random grouping situation consistently develop better study habits during the elementary school years.
3. Superior pupils generally develop superior study habits in both types of grouping.

Sociometric Choice

1. The proportion of "stars", "regulars", and "neglectees" were similar in both groupings.

2. Superior students lose some sociometric status when placed in ability grouped classrooms.
3. Average and slow pupils have a far better chance of gaining social recognition in ability grouped classrooms.
4. Ability level seems directly proportional to sociometric status in random groups.
5. There seemed to be no effect between groups on a child's ability to perceive accurately his sociometric status.

Pupil Attitudes

1. Attitude toward peers is consistently related to ability in randomly grouped rooms.
2. Ability grouping appears to cause more favorable attitudes toward teachers by superior and slow children.
3. Boys of low ability, in ability grouping, developed more favorable attitudes toward school.
4. The ability grouped children tended to have higher emotional disturbances scores.

Self Concept and Self Concept Changes

Effects of ability grouping on the self concept variables are harmful to at least some of the pupils.

Personality

1. Ability grouping does not cause the development of inferiority feelings among slow pupils.

2. The study failed to support the contention that aggression and depression are higher in random grouped classes for superior and slow pupils because of the frustration encountered in a program geared to the average.

3. The two groupings have no differential effect on pupil anxiety at any ability level.

When children are grouped according to achievement criteria, there is considerable heterogeneity in relation to age within each group. Franseth and Koury report on a study which analyzed some of the effects of interage and intergrade groupings.[29] Among the findings were:

1. The academic achievement of pupils in most grade levels was favorably influenced by the fact that they were members of a multigrade class (three grades).

2. Membership in a multigrade class contributed favorably to the personal adjustment of pupils.

3. The social adjustment of pupils in a multigrade class was improved.

4. Pupil attitudes toward school were better in the multigrade group.

5. Parents of pupils in multigrade classes expressed strong support in favor of such grouping and evidenced better attitudes toward school than did the parents of regular-grade pupils.

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[29] Walter Rehwolt and Warren W. Hamilton, "An Analysis of Some of the Effects of Interage and Intergrade Grouping in an Elementary School". Final chapter of dissertation, University of Southern California, January, 1957. Reported by Franseth and Koury, op cit., p. 31-32.

6. Multigrade pupils made greater improvement in certain characteristics of behavior. Evident at every grade level, this finding supported the hypothesis that certain patterns of behavior would show more improvement in classes in which there was a wider range of ages than in regular classes where there was a limited range of ages. Where evidence of leadership was indicated, there were less aggressive or withdrawn tendancies.

7. Pupil [illegible] relationships in multigrade and regular-grade classes were similar.

The Planning Committee concludes that ability grouping of children can be detrimental to some children, if carried to excess. The Committee agrees that grouping to achieve some degree of homogeneity, for certain purposes, for varying periods of time, has value. The implications for organization in the North End-Brightwood School indicate a need for sufficient flexibility that children can be grouped and regrouped as their needs and purposes change. Finally, there should be ample opportunity for children to be functioning members of groups with great variation in abilities and interests.

The Committee believes that a group of one hundred children is a viable size for attaining effective, flexible grouping practices. It should be heterogeneous in every respect including age, grade, ability and achievement. In a group of this size, teachers will be more able to adapt the size of the group to the task at hand. There will also be less likelihood that isolates will appear at the extreme ranges of criteria as usually occurs with smaller basic units. For

instance, instead of having one twelve year old working at a second grade reading level with nine year olds, there will likely be three or four. That he is not alone in this case, can be tremendously important to the twelve year old.

The Committee investigated to determine whether a random group of fourth, fifth, and sixth graders represented a narrower range of differences than might be found in an average heterogeneous fifth grade. In this case, the Committee used the range as represented by composite reading and arithmetic scores received in the Iowa Test of Basic Skills as indicators of the degree of heterogeneity. The results are listed:

Classroom	Grade Equivalents	
	Arithmetic	Reading
A	9.5 - 3.2	9.7 - 2.2
B	7.8 - 3.5	6.7 - 3.1
C	6.6 - 3.0	7.1 - 2.4
D	6.0 - 3.1	6.2 - 2.4
E	7.6 - 3.0	8.1 - 2.3
Group of Random 100 Fourth, Fifth, and Sixth Grade Children	7.8 - 2.0	8.0 - 1.6

It is interesting to note that the range in achievement does not seem to have increased significantly in this sample by grouping children in grades four, five, and six together. Further analysis of the group of children selected at random will be undertaken in Chapter XII.

Vertical Organization

Vertical school organization is that organization which provides a structure for classifying and moving children upward from entry into school to departure from school. In the one room school of early American education, this upward mobility of pupils was accomplished as the child acquired skills and knowledge in increasing degrees of difficulty. Normally, he was permitted to progress according to his ability and effort regardless of age. No artificial barriers or objectives were placed in his way.

As more children became involved in the public school process, the problem of teaching large numbers of children in multi-room schools became greater. The administrative solution to the problem of grouping children came to be called "grading". Grading consisted of arbitrarily determining how much material and how many skills could be covered by the average child in a given school year. This material represented what was expected to be covered in that "grade". Each child was then expected to proceed from grade to grade as he mastered the prescribed material. Individual differences in ability and rate of learning were compensated for by promotion, double promotion, and non-promotion. This pattern of vertical organization has remained basically unchanged since its origin in the Quincy Grammar School in 1848.

The inadequacy of the graded program for meeting individual needs was recognized almost from its inception, and a variety of schema were developed and tried in order to compensate for, or "get around", the graded organization. Some of these attempts have been previously

described in this report, others were extra self-help activities, differentiation of assigned material, and half-term promotions. In nearly every case grade terminology remained.

Goodlad believes that four movements provide the basic impetus to reform the existing school organization practices:

1. Development of a method of systematic inquiry and reflection with its implications that instruction ..."should be designed to educate young people to promote a better social order, with social problems as its subject matter and problem-solving as its method...."
2. Attention to human development which "...revealed that children differ not only physically, emotionally, and socially, but also intellectually."
3. The research done on the effects of many school practices on children. Goodlad cites the body of research on the negative effects of non-promotion on students as an example.
4. Newer learning theory that "...indicated that content should be reorganized for the development of inductive and deductive thinking without references to its structuring or as a man-made subject."[30]

He points out that, although the implication of these developments do not dictate a particular structure, the nongraded pattern appears to be "amazingly" compatible.

The Nongraded Concept

The first major attempt at eliminating grade terminology (non-gradedness as a modern concept) began in Milwaukee in the late 1930's. The nongraded movement gained little momentum, however, until the late 1950's. It has now become an increasingly accelerated movement. A nation-wide survey by the NEA Research Division in 1959 indicated that

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[30] John I. Goodlad and Robert H. Anderson, The Nongraded Elementary School, Harcourt, Brace and World, New York, 1963, pp. 51-52.

8.6 per cent of the 819 districts reporting indicated some form of nongraded organization.[31] A survey of 441 school systems by ERS in 1964 indicated that nearly one third were nongraded to some degree. Fifty-two per cent of school systems with populations over 100,000 had nongrading in one or more schools.[32] The trend indicated by these two reports is graphically represented by these two surveys.

The Committee searched for a definition of nongradedness which was consistent with its philosophy and objectives. The description which follows by Gore appears most appropriate.

> ....an organizational arrangement that permits continuous educational progress for all by providing individual children opportunity to work at their own rates of speed without fear of failure. The nongraded unit is, in short, an administrative device for putting into practice a democratic philosophy that emphasized the value of the individual child.[33]

A work conference sponsored by the New York Department of Education in 1964 defined the essential characteristics of nongradedness.[34] These characteristics are also consistent with the position statements of the Committee and are therefore included:

1. An adaptable curriculum-operationally defined.
2. Inventorying and diagnosis for teaching.

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[31]National Education Association, Research Division, Administrative Practices in Urban School Districts, 1958-1959, Research Report 1961-R10, Washington, D.C., National Education Association, 1961.

[32]National Education Association, Research Division, "Nongraded Schools", NEA Research Memo, May 1965, Washington, D.C., National Education Association, p. 2.

[33]Litham Gore, "The Nongraded Primary Unit", School Life, XLIV (March, 1962), pp. 9-12.

[34]Louis T. DiLorenzo and Ruth Salter, "Cooperative Research on the Nongraded Primary", The Elementary School Journal, Vol. 65, Number 5, February, 1965, p. 275.

3. Individualized instruction (for example, subgrouping)
4. Non-forced and unobstructed learning.
5. A reporting system consistent with the philosophy.
6. A nongraded program in both reading and arithmetic.
7. The absence of grade labels and related machinery.

The communities visited by committee members for the purpose of learning more about nongradedness presented a variety of approaches to nongradedness. In some schools, the children could tell the visitors what grade they were in although their teachers insisted they were nongraded. In other instances, investigation showed that "levels" had, to all intents and purposes, replaced "grades". A few were found to be truly nongraded in theory as well as practice.

The comparison of graded and nongraded structure by Goodlad was helpful to the Committee in clarifying some of the confusion and perhaps in serving the purposes of this report.[35]

Graded Structure	Nongraded Structure
A year of progress in subject matter seen as roughly comparable with a child's year in school.	A year of school life may mean much more or much less than a year of progress in subject matter.
Each successive year of progress seen as comparable to each past year or each year to come.	Progress seen as irregular; a child may progress much more rapidly in one year and quite slowly in another.
A child's progress seen as unified advancing in rather regular fashion in all areas of development, probably working close to grade level in most subject areas	A child's progress seen as not unified; he spurts ahead in one area of progress and lags behind in others; may be working at three or four levels in as many subjects.
Specific bodies of content seen as appropriate for successive grade levels and so	Bodies of content seen as appropriate over a wide span of years; learnings viewed vertically or longitudinally rather than horizontally.

[35] Op. cit., p. 58-59.

labeled; subject matter packaged grade-by-grade.	Adequacy of progress determined by comparing child's attainment to his ability and both to long-term view of ultimate accomplishment desired.
Adequacy of progress determined by comparing child's attainment to coverage deemed appropriate to the grade.	Slow progress provided for by permitting longer time to do given blocks of work; no repetitions but recognition of basic differences in learning rates.
Inadequate progress made up by repeating the work of a given grade; grade failure the ultimate penalty for slow progress.	Rapid progress provided for both vertically and horizontally; bright children encouraged to move ahead regardless of the grade label of the work, no fear of encroaching on work of next teacher.
Rapid progress provided for through enrichment; encouragement of horizontal expansion rather than vertical advancement in work; attempt to avoid moving to domain of other teacher above.	Flexible pupil movement; pupil may shift to another class at almost any time; some trend toward controlling shifts on a quarter or semester basis.
Rather inflexible grade to grade movement of pupils, usually at end of year.	

It became clear that although there were many obvious advantages to a nongraded structure, there were also some "pitfalls" to be avoided. In 1966 Hillson suggested some of the advantages and disadvantages in a nongraded program.[36] The Committee believes there is significance in the fact that he lists nearly twice as many advantages as disadvantages. His suggested list follows:

The advantages claimed are that:

1. There is continuous pupil progress, without predetermined barriers.
2. Children compete with their own records rather than with each other.
3. Children are happier without worry about promotion.
4. Many children who are slow starters (who would flunk a regular first grade) subsequently make up for it and finish the primary unit in the regular three years.
5. Certain slow-learning children frequently, if given enough time to cogitate and assimilate, may achieve much better.

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[36]Maurie Hillson, Change and Innovation in Elementary School Organization, Holt, Rinehart and Winston, New York, 1966, pp. 295-296.

6. There are no gaps in instruction since no grades are skipped.
7. There is no repetition of material a child already knows, since he begins a new year where he left off.
8. The system is well adapted to lags and spurts, which psychology has shown are typical of growing children.
9. The nongraded school encourages flexibility in grouping.
10. Emotional needs of children may be satisfied to a greater extent in a nongraded program, thus promoting mental health.
11. Discipline problems may be reduced, because of less boredom when children are working where their capabilities permit.
12. Parents may have more rapport with the school due to the information program necessary during the implementation of nongrading.
13. The nongraded program promotes more teamwork on the part of the faculty.
14. Pressures to achieve end-of-term goals and to maintain standards are reduced or eliminated.
15. There is increased teacher awareness of pupil individuality, since individual differences are at the very core of the teaching.

The disadvantages claimed are that:

1. There is a grave danger that establishing nongrading without curriculum reform results in simply replacing levels for grades. The levels then become hurdles to jump, much as grades are at the present time.
2. Since school curricula are currently organized around topics covered at certain grades and depend heavily on graded textbooks, basic changes must be made or the curricular pattern and school structure will be incompatible. There is a need to determine sequential learning in all subjects and this will require a great deal of time and effort by the faculty.
3. There is some difficulty in aligning graded with nongraded units or schools, for example, a primary unit with a graded intermediate program, or a nongraded elementary school with the graded junior high.
4. Teachers and parents are conditioned to the graded structure and there is a strong tendency to continue "grade mindedness".
5. Extensive records must be kept for each child.
6. Teaching is more challenging and difficult (but probably more rewarding).
7. Nongrading alone does not improve the student's achievement level in education; there must be significant differences in the teachers' instructional practices.

8. Nongrading nearly always results in the need to plan new reporting practices to parents since the traditional marking systems are not consistent with the aims and methods of nongrading.

Research on nongraded organization is inconclusive. Most conclusions are based on surveys and are primarily related to atmosphere rather than achievement. Goodlad indicates that the surveys report:

> ....reduced tensions in children, increased teacher awareness of pupil individuality, and increased parental understanding of the school....greater encouragement for these (bright) children to move forward vertically with more stimulating tasks and that teachers....had no fear of encroaching on materials reserved for the next grade.[37]

With regard to research studies related to achievement, Goodlad states that the "....data are too limited to permit general conclusions, but it is gratifying to note that the nongraded school appears to hold its own firmly."[38]

The above reports closely parallel comments by personnel in the many communities using some form of nongradedness that were visited by committee members during the past year.

One is led to the conclusion that a community must basically rely on its intuition and experience in developing an organizational pattern; that it should be consistent in philosophy and practice with what is now known about learning and child development; and that it be consistent with the philosophy and objectives as established by that community. The hope remains that definitive, reliable research studies utilizing trustworthy instruments of measurement will be designed in the near future to help in this task.

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[37]Goodlad, op. cit., p. 57.

[38]Goodlad, op. cit., p. 58.

Conclusions

It must be emphasized that a system of organization as represented by nongradedness or any other pattern is no panacea for problems of curriculum and instruction. It can only serve as an administrative device which can encourage or inhibit the teacher in carrying out his philosophy of education as it relates to the children in his care.

The Planning Committee concludes, on the basis of its study and discussion, that a nongraded system of organization represents the appropriate system for the North End-Brightwood School. The Committee further recommends that additional effort be directed toward the development of curriculum, methods, and materials that flexibility in such an organizational plan permits.

CHAPTER VI

SPECIAL CLASSES

Among the children who will be served by the North End-Brightwood School will be some who could, for lack of a better term, be categorized as educationally retarded. Barbe describes these children as those who are:

> .....performing below grade level commensurate with age level due to inherent limitation of mental ability.
>
> .....performing below grade level commensurate with age level in situations in which the standards are based on the performance of groups for whom different educational and socio-cultural opportunities have been available.
>
> .....performing below grade level commensurate with age level due to lack of interest and motivation.[40]

The Commonwealth of Massachusetts General Laws, Chapter 71, Section 46 states:

> Educable mentally retarded children and trainable mentally retarded children shall be enrolled in separate classes, except in those cases approved by the Department of Education.

Educable children are defined by the State as those who receive a score of from fifty to seventy-nine on an intelligence test approved by the Departments of Mental Health and Education, and administered by an examiner approved by said departments. Trainable mentally retarded

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[40] Walter J. Barbe, "Who Are the Educationally Retarded?" Education LXXXV, April 1965, p. 452.

children are considered to be those who receive a score from twenty to forty-nine.

It is generally accepted that at best, the standardized test is an inadequate measuring instrument. One must, therefore, rely on observation of the child and judgement in interpreting the test results. The teacher must realize that the purpose of identification is merely to provide a starting point and that her observations are of present status, and not a predictor of future attainment. However, the intelligence quotient can be used to a limited degree in setting up expectations for the rate of learning. It helps also to estimate a child's mental age and, thereby, appraise his readiness for certain academic activities and to explain some behavior patterns. Vital developmental information about the child and the examiner's clinical experience tend to reduce the probability of error in diagnosis.

Analysis of the characteristics of the educationally retarded reveals that there is much commonality with those of the disadvantaged child discussed in Chapter IV. The primary difference appears to be only in the degree of academic retardation. The severity of this retardation for some children has prompted grouping practices which will eanble a more specialized approach to the solution of their problems. It is not surprising that the characteristics common to special programs for the educationally retarded are not too dissimilar to those of other children. The characteristics of educationally retarded programs which follow are illustrative. Effective programs for the educationally retarded should include:

1. Well-defined and explicitly stated educational goals.

2. Indigenous and innovative curriculums and instructional practices.

3. Recognition of the worth and dignity of the individual pupil, regardless of his socioeconomic background, vocabulary, personal habits or values.

4. Meaningful and significant in-service educational activities for teachers who are temperamentally suited for their tasks.

5. Effective utilization of educational specialists, such as counselors, school psychologists, (social workers) school nurses, to supplement the work of classroom teachers (aides) etc.

6. Decentralization of administrative control.

7. Close cooperation between school, home, and civic and governmental agencies.

8. Active participation of local neighborhood leaders.

9. Cultural activities for the pupils that supplement their school and home environments and experiences--trips to museums, art galleries, concerts, public libraries, downtown department stores, universities and colleges and other schools.

10. Use of the school as a neighborhood cultural, social and recreational center.

11. A carefully conceived and professionally executed plan of evaluation of the total educational progress of each pupil.

The educationally retarded and disadvantaged are at a particular disadvantage in the intermediate school because of what Deutch refers to as the "cumulative deficit hypothesis". This hypothesis is a research-supported statement which claims that the inappropriateness of present school programs for these students seems to increase learning deficits rather than alleviate them.[41]

The challenge is to develop curricula, materials and techniques

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[41]Martin Deutsch, "Early Social Environment, Its Influence on School Adaptation", The School Dropout, D. Schreiber (ed.), Washington, D.C.,National Education Association, 1964, pp. 89-100.

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which will reverse this process. It is expected that the workshop on curriculum for special classes planned for the coming summer, will point the way to a solution. The curriculum should be built on new insights into human behavior and new media to motivate learning. Materials should be tactile and manipulative. Emphasis should be placed on the discovery approach in science and social studies. Programs in art and music should provide for expression of self, geared to the individual's learning pace and learning style.

Special emphasis should be placed on materials of an audio-visual nature. Wendt believes that, "Since audiovisual instruction offers an experimental basis for learning, learning is more meaningful. In contrast to the symbolic nature of words, audio-visual materials are much more like real life experience. Their meaning is more accessible and more unmistakable and, therefore, more easily and more correctly absorbed. Their direct appeal, by producing strong interest and clear meaning, increases the retention of what has been learned."[42] McLean states that: "Research has proven the effectiveness of the motion picture with retarded and with bright children in several different subjects and methods."[43] She concludes that if the effectiveness of the film is to be considered in terms of oral responses to information tests, the film is far more effective for the retarded than for the bright pupil. Since the mentally retarded makes far more oral responses than he does written, it would seem that films are a decided advantage to him. The more realistic and vivid these experiences are

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[42]Paul R. Wendt, Audiovisual Instruction, Department of Classroom Teachers, NEA, Washington, D.C. p. 3.

[43]Mary C. McLean, An Annotated Catalogue of Selected Films in the Field of Science and Guides for Their Use with the Mentally Retarded, Unpublished doctoral dissertation, 1950, p. 17.

made, the pleasanter the learning situation and more lasting the information.

The use of much role playing, open-ended stories, trips etc. will be found helpful for these students. The school program should also incorporate an ingredient that is not academic in nature but essential to good mental health. This ingredient is integration of the educationally retarded into the total school program. Flexible scheduling should allow for the youngsters to be placed with their peers for conversational Spanish, physical education, art, music, and sometimes social studies and science.

The role of the teacher may be considered especially important in terms of teaching the educationally retarded. He must not only be sensitive to children's problems, but even more, must be able to develop in the student a positive self-image as he sees himself in the context of the school setting and in relation to his peers. It may well be that the degree to which the teacher accomplishes this with each child, is the degree to which he may measure his ultimate success as a teacher.

Pupil Adjustment Classes

For a number of years, Springfield has provided special help and opportunities for some children who are hyperactive, and acting out, and as a result are difficult to contain in the regular classrooms through placement in Pupil Adjustment classes. The Committee recommends two classrooms in the North End-Brightwood School be provided for this group of children.

Implications for Facilities for Special Classrooms

It is anticipated that five classrooms will be needed for education-

ally retarded children in the North End-Brightwood School. At least one of these rooms should be equipped for "trainable" children.

Although the specific recommendations for the physical facilities of these rooms will be found under "Educational Specifications", there are some general criteria which should be considered since these children may have unique problems of a physical, mental, or an emotional nature. These necessary requirements are listed for the sake of brevity:

1. Consideration should be given to location of classrooms and facilities which will permit multiple handicapped children mobility and participation in the total school program.
2. Rooms should be located in the same general area of other classrooms.
3. Rooms should be located as close as practically possible to the special art rooms.

The design emphasis for these rooms, as well as the curriculum, should be on integration of children rather than separation.

CHAPTER VII

REPORTING PUPIL PROGRESS

The problem of evaluating and reporting pupil progress to the satisfaction of pupils, teachers, and parents still remains largely unresolved. School systems often survey each other to determine common practice and current trends. They usually establish joint educator-community committees to design a system of reporting which appears to meet best the philosophy and needs of that particular school community. Most communities then attempt to publicize, explain to and educate parents, teachers, and children on how the system should be interpreted. Invariably, there is neither complete acceptance nor understanding by the various community elements. Some of the reasons for these difficulties emanate from:

1. Complexity of the educational process.
2. Difficulties inherent in achieving objectivity due to variability in personality interactions and lack of objective evaluative instruments.
3. Inability to determine achievement in relation to capacity.
4. Conflict of the demand for comparative evaluation against the evaluation of achievement in relation to ability.

5. Illusion that one system is more reliable than another.

6. Lack of clear-cut behavioral objectives.

It is little wonder then, that there are almost as many systems of reporting as there are school districts. The styles range from completely oral or written reports, through "S" and "N", "A", "B", "C", "D", check lists, to complex combinations. The variety alone attests to the difficulty in developing an effective, acceptable reporting system.

Although one may question the values to children and teachers of reports of progress, the Committee believes that it is mandatory that the parent be periodically informed of his child's progress. The fact that the known methods of doing this are imperfect, does not mean that the practice should be discontinued. Crosby[43] states that

> .....if a report helps a child, his parents, and his teachers learn more about what he is capable of, where he is reaching his potential, what is being done to foster his learning, and perhaps most significant of all, if it provides 'that something to grow on,' it is a good report.

The Planning Committee feels that this can be done most effectively through a well thought-out and executed parent-teacher conference. However, the reality of life is such that not all parents can participate in conferences due to such things as jobs, illnesses, small children, etc. The fact remains that some system of reporting must be devised in each district so that the knowledge of the child's progress in school can be transmitted to parents. This requires that some sort of report be sent to the parent. The Committee felt that certain guidelines should be established for the evaluation or development of this report, and that

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[43]Muriel E. Crosby, "Good Report", N.E.A. Journal, 51: 45-47, April 1962, p. 47.

it must be consistent with the philosophy, the organization, and the objectives of this school. The report should:

1. Indicate progress in relation to the child's ability.
2. Provide an opportunity to build self-concept.
3. Be simple.
4. Give evidence of general rather than specific progress.
5. Have provisions for indicating effort, attitude, and areas .. strength.
6. Be supplemental to the parent-teacher conference.

The sample card (Appendix A), in conjunction with a parent-teacher conference, is an attempt by the committee to encompass these criteria. Although reactions to this card by teachers and parents were sampled and appropriate changes made, it is intended to be only a beginning. Further refinements should be made as the curriculum and objectives of the community school become more definitive. It should be noted that the Reading and Arithmetic sections are designed to reflect actual level of achievement in a non-graded program. The Committee recommends that the cards be given to parents at the time of the conference. For those parents who are unable to participate in a conference, the cards could be sent home twice a year on specified dates. Although there is less detail in this card as compared to some currently being used, the Committee believes that it generally answers the question, "How is 'Johnny' doing in school?" It is hoped that this card will stimulate parents to contact the school for additional detailed information. The Committee anticipates and recommends additional investigation into the process of reporting to parents, particularly as it relates to the curriculum, philosophy, and community of the North End-Brightwood School.

CHAPTER VIII

TEACHER UTILIZATION

For every new plan for organizing pupils, a variation in the way teachers are utilized has been required. There has been a continuous search by educators to find and develop the most effective and efficient ways of using school personnel.

At the elementary level, the practice of one teacher teaching all subjects to all children in a self-contained classroom is almost universal. While it is true that many intermediate grade classrooms have some element of departmentalization or semi-departmentalization, even in these cases, the child receives the major portion of his instruction from one teacher.

At the secondary level, one finds that departmentalization, by subject, is the traditional approach. Unfortunately, in most cases, departmentalization (each child having nearly as many teachers as subjects) very rapidly becomes "compartmentalization" with little effort exerted to demonstrate or use the interrelatedness of content to increase the effectiveness of teaching. This problem is inherent in any plan which involves grouping children among several teachers regardless of age or level.

In spite of the potential problems, the Committee believes that children can be taught more effectively by several teachers in a

variety of groups than by one teacher in a self-contained classroom teaching all areas. The Committee also believes that most of these problems can be eliminated at the outset by developing an appropriate staff utilization pattern.

One such pattern which has received considerable attention during the past ten years, and appears to have merit is conventionally called "team" or "cooperative" teaching. Shaplin defines team teaching as "....a type of instructional organization, involving teaching personnel and the students assigned to them, in which two or more teachers are given the responsibility, working together for all, or a significant part of the instruction of the same group of students".[44]

Some authorities choose to distinguish between team teaching and cooperative teaching. Goodlad, Anderson and others see team teaching as a formally organized hierarchy with Team Leaders, Senior teachers, Interns, etc. Cooperative teaching is seen as a group of teachers who accept responsibility for teaching the same group of children without designated leadership within the team. In cooperative teaching, each teacher is expected to assume a leadership role as the circumstances dictate.

The Planning Committee endorses the latter type of team process, for it believes that this most nearly represents the philosophic basis for teacher effort as perceived by the Committee. The Committee concurs with the conceptualization of team effort suggested by Dean and

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[44]Judson T. Shaplin and Henry F. Olds, Jr., Editors, Team Teaching, New York, Harper Row, 1964, p. 15.

Witherspoon of the United States Office of Education Staff, and reported by Bair and Woodward:

> The heart of the concept of team teaching lies not in details of structure and organization but more in the essential spirit of cooperative planning, constant collaboration, close unit, unrestrained communication, and sincere sharing. It is reflected not in a group of individuals articulating together, but rather in a group which is a single, unified team. Inherent in the plan is an increased degree of flexibility for teacher responsibility, grouping policies and practices, size of groups, and an invigorating spirit of freedom and opportunity to revamp programs to meet the educational needs of children.[45]

Because the Committee rejects the hypothesis that a hierarchy of position is needed or desirable, all future references to teams in this report should be understood to represent a group of persons with common goals for a given group, without an intrinsic framework for leadership-followership positions.

Advantages and Disadvantages of Team Teaching

Any statements of advantages and/or disadvantages of team or cooperative teaching must be considered to be more hypothetical than proven statements of fact, since no definitive, reliable studies have been conducted to permit otherwise. In spite of this, the Committee felt it necessary to determine and discuss the pros and cons of this type of staff utilization as a step toward its final recommendations. The following advantages and disadvantages listed by Hillson are fairly comprehensive:

Advantages

1. Superior teachers can exercise greater influence in

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[45] Medill Bair and Richard G. Woodward, Team Teaching in Action, Houghton Mifflin Company, Boston, 1964, p. 22.

the school and still remain in classroom teaching.

2. Team teaching facilitates grouping because the basic group is so large that small groups can easily be formed for almost any purpose and there are enough really bright students to make advanced projects feasible.
3. During large group teaching periods other teachers are freed for small group work, lesson planning, and parent-teacher conferences.
4. Pupils spend more of their school time receiving instruction than when they are in self-contained classrooms.
5. More extensive use is made of visual aids than would be in self-contained classrooms, wherein the teachers lack the time and sometimes the knowledge to use these resources.
6. There is more efficient use of space, materials, and equipment.
7. Teachers find it helpful to exchange information and viewpoints on various problems.
8. Evaluation is the combined judgement of several teachers and thereby improves the process of pupil appraisal.
9. It furnishes an impetus to improve curricula.
10. It may be very effective for training student teachers.
11. The beginning teacher is not isolated; he has supervision and help from experienced teachers.
12. Part time teachers with special competencies can be employed, even though they are not able to instruct full days.
13. During a member's illness, the others can fill the void with less loss of instructional time than when a substitute comes into a regular classroom and often does nothing more than "baby sit".
14. The teacher works harder on improving the instructional ability of a team.

Disadvantages

1. The frequency and intensity of contact of the team members leads to complex problems of human relations.
2. The problem of status pyramiding of teachers under a team chairman works against a healthy climate.
3. Inherent in the flexibility of team teaching is the fact that much time and effort must be spent on the complexities of scheduling and planning all the group and individual activities.
4. Mechanical aspects of evaluation may be more difficult.
5. Questions children have during large group lectures or demonstrations must wait until later.
6. Opportunities for pupil leadership may be lost because of the complexities of the program and the size of the group.

7. Noise may be a problem in a large group or when several small groups are working in one room.
8. Instruction tends to become more lecture-type and formal.
9. Interaction between the superior teachers and the learners (especially in the hierarchal plan) may be minimal and the contacts that learners have with teachers may be limited to the teachers of lesser competence.
10. It is very difficult to find teachers with the special competencies and high qualifications necessary for team leaders and senior teachers.
11. It will probably cost more since the team leader and the senior teacher will be paid more, secretarial help is usually provided, and new buildings with adjustable space are needed.[46]

Items numbered two, nine, ten, and eleven under "Disadvantages" probably can be disregarded for our purposes since the Committee does not subscribe to a hierarchal structure within the team. However, the Committee recognizes that there may be some danger that, in the event leadership did not emerge within the team, a lack of team efficiency and direction might develop .

As in other areas of its planning for the North End-Brightwood School, the Committee turned to research for help in evaluating the merits of cooperative teaching . A review of research on team teaching, conducted by Glen Heathers indicates the scope and quality of investigative efforts in this area. The opinions and findings of Heathers reported below are illustrative:

> "....most of the research on team teaching has not been well designed and yields only limited and uncertain findings".
>
> Pupil Achievement
>
> The usual findings in studies of pupil achievement is that scores on standardized tests are about the same with cooperative teaching as with the self-contained classroom.
>
> Pupil Adjustment
>
> It is reassuring that research studies have in no instance

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[46]Maurie Hillson, op. cit., p. 165-167.

obtained evidence that cooperative teaching is harmful to pupils' adjustment. In fact, some studies have found cooperative teaching to hold advantages over the self-contained classroom, in promoting personal-social development.

Parent Attitudes

The research studies have consistently shown that a considerable majority of parents hold favorable attitudes toward cooperative teaching.

Teachers' Attitudes

The few findings which have been reported in the literature suggest that the majority of the teachers in teams hold generally favorable attitudes toward cooperative teaching. This is not a surprising finding since, in most projects, teachers have volunteered to participate.[47]

Although the research on cooperative teaching is not conclusive, there are positive indications that it has potential for improving instruction.

Conclusions

The Committee believes that cooperative teaching is a necessary adjunct to the nongraded form of pupil organization previously recommended in this report. However, the Committee strongly believes that its effectiveness will depend directly on the ability of team members to work and plan cooperatively. This position places considerable importance on selecting teachers with those characteristics which are necessary for grouping effort. The details of these characteristics will be found under "Teacher Characterustics". A recommendation that four "general" teachers be the basic team unit for each one hundred children seems reasonable and workable to the Committee.

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[47]Glen Heathers, "Research on Implementing and Evaluating Cooperative Teaching", The National Elementary Principal, Volume XLIV, Number 3, January 1965, pp. 30-32.

The Committee also believes that the possibilities of success with cooperative teaching will be determined by how effectively such things as physical plant, curriculum, special techniques and materials can be developed to meet the needs of the children and teachers who will be part of a nongraded, cooperative teaching environment.

The Committee strongly believes that adequate team planning time must be incorporated into the schedule on a regular basis if the full potential of team teaching is to be realized. In addition, the Committee is convinced that the teaching staff at this school should be placed on a twelve month schedule, at least initially. The complexities of curriculum development, changes in methods and materials requiring in-service education, and adequate pre-planning make a longer work year mandatory in the opinion of the Committee. Although the Committee believes the same need is present in every school, there is particular justification in the North End-Brightwood School.

Use of Specialists

The Planning Committee spent considerable effort in determining the role of specialists in the North End-Brightwood School. A survey of the literature revealed that there were about an equal number who believed the teacher should teach all subjects and those who thought a teacher should be limited in the number of areas covered. Each author could give a convincing argument of his particular point of view. Unfortunately, the Committee found most of the arguments to be based on emotion and intuition rather than "hard-nosed" research. In the absence of such research, the Committee felt competent to make its own decisions on the use of specialists. In this instance, we

are considering only those areas which are a normal part of the curriculum for all children.

The Committee recommends that special teachers be provided in the areas of art, physical education, and music. It was felt that these particular areas required skills, talents, and knowledge above and beyond what one could normally expect of the average classroom teacher. Secondly, the Committee felt that the average teacher could not be expected to acquire adequately the necessary depth in these areas through in-service training. Thirdly, the Committee believed that specialization in these areas would not only increase the potential effectiveness of teaching in those areas, but also in the remaining areas for which the classroom teacher is responsible, by permitting more detailed and careful planning.

The Committee recommends that the specialists be considered teams within their specialities. There would be an Art team, Physical Education team, Music team, and a Special Service team. Each team is to assume responsibility for determining the experiences provided each child within that team's specialty. The Committee emphasizes, however, that there must be careful and consistent planning between the teams of generalists and specialists in order that close correlation of learning activities can be achieved. Time for this cross-discipline planning must therefore be provided. More detail with regard to the functions of these teams will be provided under the appropriate sections.

CHAPTER IX

TEACHER CHARACTERISTICS

It is axiomatic that the effectiveness of any educational program in any school is directly related to the competencies of its teachers. It is the teacher, in his day to day relationships with children, community, and fellow staff members, who sets the tone and climate of any school. The Planning Committee took cognizance of this fact in the very early planning stages. There was also a realization that if the program evolving for the North End-Brightwood School was to achieve any degree of success, the teaching staff must possess or acquire competencies above and beyond those expected of the teacher in a conventional school with its conventional curriculum and organization. The basic qualifications of the teacher in most schools today are that he be sufficiently knowledgeable of children, curriculum, and methods that he is to use to be able to provide the child with the "bridge" from the unknown to the known.

The role of facilitating learning is not a simple one. Its difficulties derive from the complex interpersonal relationships always present when two or more prople interact toward the solution of a common problem, in this case, "learning". The classroom teacher is required to react to each pupil in such a way that each child operates within a framework which is positive and stimulating for him alone.

It has been estimated that the average classroom teacher must make at least 500 interpersonal judgements each day. The degree to which these judgements contribute to positive pupil growth may be the degree to which the teacher is successful in the classroom.

The recommendation of the Planning Committee that teachers work in teams broadens the perimeter of essential characteristics beyond those necessary in the self contained classroom. Committee members visited many schools in which team teaching had been in operation for several years. Invariably, the principal would relate a team's effectiveness to the degree of success the teachers achieved in working together. Nearly every author on team teaching takes special note of the need for the practice of effective group dynamics within the team. Shaplin uses a model developed by Getzels and Thelan to illustrate the possibilities of conflict between the nomothetic (institutional, team) goals and idiographic (individual team member) needs and expectations.[48] The problem of defining goals and working effectively together is of paramount importance in team teaching. The Committee believes that certain teacher characteristics are desirable to help insure team success.

Another area which may have relevance to the characteristics of teachers is that area which concerns itself with school-community involvement and the resultant interrelationships. If the North End-Brightwood School is to function effectively as a true community school, the traditional barriers between the school and community must be lowered. People in the community must feel more free to visit the school, talk with school personnel, and to work together on common problems whether they be child, school, or community centered.

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[48]Shaplin, op. cit., pp. 66-70.

The image of the school held by some people as an unapproachable institution must be changed. The school must go even further than to be passively receptive. It must expect to make many initial overtures. It must accept as part of its role, the responsibility for reaching into the community to bring about community contact, and for establishing its willingness to be a working partner. The importance of the teacher in this role is quite clear and will require particular kinds of attitudes and competencies.

The Committee feels that the following are representative of the characteristics needed by teachers in the North End-Brightwood School.

She should:

1. Have a desire to work with children and parents in an urban area.
2. Show strength in at least one subject area (excluding art, music, and physical education), so that she can assume leadership within her team in this area.
3. Indicate a willingness to visit homes in the community and to participate in some degree in community activities.
4. Have had some experiences with innovative techniques.

Ryans[49] conducted an ambitious study of teacher characteristics which involved 100 separate research projects, with 6,000 teachers in 1,700 schools participating. Some of his conclusions related to the personal qualities which appear to distinguish outstanding elementary classroom teachers provide insight into this area. The following traits were listed as being common among this group of teachers:

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[49]David G. Ryans, Characteristics of Teachers, Washington American Council on Education, 1960, p. 360.

1. Manifest extreme generosity in appraisals of the behavior and motives of other persons.

2. Indicate strong interest in reading and literacy matters.

3. Indicate interest in music, painting, and the arts in general.

4. Report participation in high school and college social groups.

5. Manifest prominent social service ideals.

6. Indicate preferences for activities which involve contacts with people.

7. Indicate interest in science and scientific matters.

8. Report liking for outdoor activities.

Additional characteristics which appear important are suggested by Fink[50].

The teacher:

1. Is ready to listen to the ideas of others.
2. Is ready to try new ideas.
3. Is able to change preconceived ideas.
4. Is able to accept criticism from others.
5. Is able to get his ideas across to others.
6. Is able to assume leadership effectively.
7. Has a strong commitment to developing a successful team program.
8. Has an attitude favoring inquiry.

The Planning Committee suggests that the selection process for personnel in this school include a small committee of teachers and the Principal. The Planning Committee believes that the possibility of including some lay person on this selection committee should be explored. The function of the selection committee would be limited to making recommendations to administration of its consideration and decisions.

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[50] David R. Fink, "The Election and Training of Teachers for Teams", The National Elementary School Journal, op. cit. p. 57.

In concluding this section, it is important to note that although the characteristics listed in this portion of the report have been applied to teachers, it is of utmost importance that all personnel in the North End-Brightwood School share the same general characteristics. It is only in this way that the goals of this school can be achieved.

Finally, the Committee recommends that all personnel at this school be selected from persons who indicate a desire to work toward the goals intrinsic in the community school concept, and that further definitive study on desirable characteristics and the selection process be conducted prior to the final selection of personnel.

CHAPTER X

AIDES AND PARA-PROFESSIONAL PERSONNEL

A survey by the Educational Research Service[51] in 1966 indicated that 217 out of 251 school systems with enrollments over 12,000 were using a total of 44,351 aides during the 1965-66 school year. New York City alone is reported to have employed 9,150 paid aides during this period of time. Although Springfield had no aides in the '50's, their initial use in the mid 60's graphically demonstrated that they could fulfill valuable and necessary functions.

Evidence that teachers recognize the need for aides is indicated by the insistence that the provision of aides be a bargaining item in the 1966-67 negotiations between the School Committee and Teachers' Association in Springfield. Aides are now required according to contract.

The evaluation of the aide program in Springfield indicates almost universal acceptance and a strong desire for an augmented aide program. This reaction was also typical for the communities reported in the ERS survey.[52]

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[51] Mary D. Skipp, "Teacher Aides: A Survey", The National Elementary Principal, Vol. XLVI, No. 6, May 1967, pp.30-33.

[52] Ibid. p.31.

The impetus for the increased use of aides is probably derived from two main sources, the teaching profession and the federal government. The shortage of teachers and increasing salaries demand that communities make the most efficient use of the professionals' time. Secondly, the demand by the public to improve education is invariably reflected in the insistence that classroom teaching become more effective. The classroom teacher, all too frequently, is unable to respond with appropriate changes in the classroom. The basic reasons for his inability to change are well stated in a Detroit project for acquiring and training teacher aides:[53]

> All too frequently, teachers do not change because they cannot change. The daily demands of their jobs - emotional demands, physical demands, and the frequency with which these demands occur - often prevent teachers from doing much beyond surviving.....Improvement in the learning of pupils, the only improvement which has any real value in the whole business of education, will only come when the teacher's role has been made manageable.

The federal funds made available through ESEA have made the initial utilization of large numbers of aides possible during the past few years and have been instrumental in providing the means for solving this dilemma. The need to provide the disadvantaged child with more individual help and attention also played an important role in the demand for the utilization of aides. Whatever the reasons for the initial use of aides, their value appears indisputable and their increased utilization in the future seems assured.

The use of non-professional auxiliary personnel need not be limited to education. Hospitals, doctors, dentists, social workers,

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[53] A Program for the Use of Paraprofessional Staff in the Detroit Public Schools, Special Projects Division, Detroit Public Schools, 1965, pp. 2-3.

psychiatric clinics, etc. are also experimenting in this area with good results. As in education, shortage of professional personnel appears to be the initial reason for this experimentation.

Although the advantages accruing to the institutions through the use of aides are significant, there is reason to believe that, if properly developed, this program could also provide invaluable service to the aide in promoting new career opportunities. An essential characteristic in this "development" would be the provision for alternative ways for a non-professional to become a professional.

Pearl and Riessman explore such an alternative in detail in New Careers for the Poor.[54] In their opinion, the use of aides is not only a way to provide needed and useful non-professional services, but also a means to develop new career opportunities for the poor. The proponents of this point of view claim that the problem with most aide programs as they now exist is that the aide position is a "dead-end street" career-wise. As such, it provides no opportunity to bridge the gaps between the non-professional, the para-professional, and the professional except through conventional educational channels. They hypothesize that experience is often as valuable and in some cases more valuable than formal education, and that the person who reaches the professional plateau through a combination of experience and formal education is at least as well trained as the person who achieved this level through formal education alone.

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[54]Arthur Pearl and Frank Riessman, New Careers for the Poor, New York: Free Press, 1965.

The "New Careers" model is suggested by Pearl[55] as being an alternate route to professionalism. He lists the three objectives for this approach as being:

1. To improve the quality of service
2. To develop adequate manpower for education needs
3. To make available meaningful work to populations now excluded from a range of occupational opportunity.[56]

Although the emphasis here has been on alternative paths to professionalism in education, similar rationale can be, and has been, developed for many other professional areas.

Implications for the North End-Brightwood School

The Committee planning the North End-Brightwood School indorses the position taken by Pearl and Riessman. It recognizes the value of and need for aides in many different capacities, and would encourage the development of training programs which would make it possible for non-professionals to become professionals through an "earn while you learn" open-ended career structure. Although it was not possible for the Committee to develop a detailed program, (this would require the coordination and commitment of the local school system, institutions of higher education, the State Department of Education, and possibly the State Legislature) a possible framework is suggested on the following page in Table I. Crude job descriptions have been developed and will be found in Appendix B.

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[55]Arthur Pearl, "New Careers and the Manpower Crisis in Education," A paper presented at the NEW Sumposium on Educational Manpower, Washington, D.C., 1967, p. 9.

[56]Ibid., p. 14.

Table I

POSSIBLE AIDE PROGRAM

	ACADEMIC	BUSINESS (CIVIL SERVICE)	HEALTH	SOCIAL SERVICE
LEVEL I	GENERAL SCHOOL AIDE	FILING CLERK	HEALTH AIDE	HOME-SCHOOL AIDE
LEVEL II	TECHNICIAN AND/OR SPECIALIST	CLERK AND TYPIST	COMMUNITY HEALTH AIDE	GENERAL COMMUNITY AIDE
LEVEL III	INSTRUCTIONAL	CLERK AND STENOGRAPHER	PRACTICAL NURSE DENTAL HYGENIST	COMMUNITY SPECIALIST SOCIAL RECREATION SPECIALIST TUTOR
LEVEL IV	ASSOCIATE	SENIOR CLERK	STUDENT NURSE	
LEVEL V	INTERN	SENIOR CLERK AND TYPIST	COMMUNITY HEALTH NURSE	CASE AIDE
LEVEL VI	TEACHER	SENIOR CLERK AND STENOGRAPHER		JUNIOR COUNSELOR

The four categories of Academic, Clerical, Health, and Social Work, represent the major segments of the community school program as perceived by the Planning Committee. The Committee recognizes that the number of levels as well as the job descriptions are arbitrary and need considerable additional study.

Recommendations

The Committee recommends that an aide be assigned to each team (generalists, specialists, health, community service, etc.), and that these aides be considered full, participating members responsible to the team.

The Committee further recommends the formation of a committee representing school personnel at all levels, aides, local colleges (including junior colleges and STI), health and social work agencies, and the State Department of Education to develop a career-oriented aide program. In-service training, effort in formal academic areas, and academic credit for certain types of non-academic experience would be expected to be essential ingredients in such a program.

CHAPTER XI

PSYCHOLOGICAL SERVICES PERSONNEL

The Committee believes that the pupil services team is an indispensable resource. The provision of consultant service to the staff and the therapy and counseling which can be provided children and parents will be of inestimable value.

It is suggested that the emphasis of these services be placed in several areas which we have not as yet even attempted in Springfield, but which may be mandatory in the future. These areas may be summarized for the purposes of this report as needing a major stress on: 1) individualizing educational and social services for those children who need it; and 2) working primarily with groups in the area of social and emotional problems.

Some children will be seen individually, but only on the basis of professional, diagnostic judgement. Other children should be seen in groups of five or more, grouped by age as well as symptomatology. Untrained personnel, in line with earlier discussion, should be utilized as aides, by providing some form of tutorial help, or in those cases where it seems indicated, to perform something like a "Big Brother" or "Big Sister" role.

Where the stress and thrust should be heaviest, however, is in the involvement of parents. The counselors will see many parents indivi-

dually, but there should be major emphasis on group work with them. Group meetings with parents should be in two contexts:

1. An attempt to arouse interest and motivation in the learning processes of their children; these should be educationally oriented.
2. Parent groups should also be encouraged to share the whole gamut of their problems: economic, social, racial, and religious; as well as their problems in the context of child-rearing.

It should be understood that work with groups, whether children or adults, requires special skills and insights and in general makes maximum demands on personnel to a degree not true of one-to-one counseling. While the staff suggested below will assume responsibility for this group work orientation, it should be regarded as mandatory to provide educational, social work, and to some extent, psychiatric supervision to the staff. In addition, there may be a need to obtain the services of people knowledgeable in community affairs, community problems, and the needs of deprived minorities.

The Committee recommends three Elementary Guidance Counselors for the North End-Brightwood School. They should have a sound background in teaching in which they have demonstrated outstanding skill in handling children, preferably at different grade levels. They should also have demonstrated skill in relationships with parents. Academic preparation in guidance, psychology, etc., though helpful, should not be regarded as a primary factor in selection. Their functions should include:

1. A consultant to teachers: A major responsibility of the

elementary guidance counselor should be to work closely with teachers, both individually and, where possible, in groups. As a staff, they should work up a manual of skills and techniques in the classroom management of children with problems. This could be passed on in their consultation with teachers. Among these techniques, a good deal of stress should be placed on "positive conditioning".

2. As Group Worker: The counselor should plan to see some children in groups of from five to eight regularly at least once a week except for those who, because of their acting out, have to be placed in "special" classes. The age range of such groups should not exceed 2-1/2 years. The purpose of these meetings would be to provide a controlled and structured situation and to reward adaptive behavior.

   It is clear that the counselor must be comfortable in undertaking this kind of group activity; that it must not conflict or interfere unduly with class schedules; and that space be available for it. Consultative supervision should be regarded as mandatory.

3. Work with Parents: It has already been noted that group work with parents should be in two contexts, educational and therapeutic. The counselor should see himself as aiding in the educational aspect of group work with parents, and in this should work very closely with the social workers.

The size of this school and the diagnostic program recommended re-

quire that there be two psychological examiners and part time consultant personnel in the form of a Social Work Supervisor, Psychiatrist, and Clinical Psychologist. Their respective duties are described below:

1. Social Work Supervisor: This should be seen as a key function. The supervisor would be responsible not only for general supervision of counselors and social workers, but also for planning and scheduling the time of consultants. The social work supervisor should be someone experienced and skilled in making differential diagnostic judgements, and one who can guide the staff in bringing services to the individual child and family with a maximum of efficiency and with a minimum of excessive intervention in the life of either.

2. Psychiatrist: The psychiatric consultant will see individually those cases where diagnostic judgement is needed. He will also, however, be available to discuss cases with staff (both special services and teaching faculty) in the interest of sound management.

3. The Clinical Psychologist: The psychologist should act as a diagnostic screening agent in those cases where a diagnostic judgement is needed. For example, it may be important to know whether a child is primarily in the "neurotic" or "character disorder" category. In this, the clinical psychologist could play an important role. He should be especially helpful in determining whether or not a child needs and can use individual supportive help from a counselor or if further evaluation is needed.

The description of the physical facilities necessary for the staff and program is provided under "Educational Specifications".

CHAPTER XII

THE EXPANDED CLASSROOM CONCEPT

The Committee's thoughts on program criteria began to crystallize as it explored what it considered to be the educational needs of the children in this community. The "Position Statements" and the conclusions reached from the studies of research and practice provided the criteria which the Committee felt essential to providing the desired educational environment in this school. It became clear that these criteria put special demands on the kind of organization to be utilized, and that the self-contained classroom, as conventionally conceived would not be adequate. The Planning Committee felt that a look at what it considered to be the advantages and disadvantages of the self-contained classroom would provide help in developing a desirable organizational pattern. These are listed:

Advantages

1. The teacher may get to know each child better.
2. Some children may feel more secure with one teacher.
3. The teacher can be more independent in determining program and organization.
4. The mechanics for providing a comprehensive Parent-Teacher report is simplified for the teacher.
5. Integration and correlation of content and approach

through unit teaching is facilitated.

6. Rules, regulations and directions administered by one person may contribute to more effective government, discipline, and classroom management.

Disadvantages

1. The teacher's time, talent, and special abilities may not be fully utilized.

2. It may be more difficult to provide for individual differences among children.

3. Substitutes may be less effective.

4. It is difficult to help new teachers who find the sole responsibility of a classroom overwhelming.

5. Exposure to only one teaching style each day may be less stimulating.

6. Evaluation of child may tend to be more subjective.

After considerable thought and discussion, the Committee concluded that the organizational pattern to be developed should build on the strengths of the self-contained classroom and minimize or eliminate the weaknesses. The Committee believes that the description of the "expanded classroom" concept which follows does this.

In this concept, four teachers will share the responsibility for the total education of a random group of one hundred children. Children in this group would be heterogeneous in every way. The Committee suggests that each teacher be assigned twenty-five children for record keeping and to insure that each child will be closely observed, counseled, and followed.

The members of the teams will be carefully selected for their ability to plan and work effectively together. To help them in this effort, they will be able to call on the help of a variety of people,

both professionals and non-professionals. This team of teachers will have great latitude in determining the curriculum, organization, grouping, teaching assignments, etc. within this unit of teachers and children. The emphasis and focus of all school and community resources will be on the child and his needs. Figure #1 is an attempt to portray this schematically.

Each team member will be responsible for acquiring special knowledge of materials, techniques, and trends in either math, science, language arts (reading), or social studies. The reading person on each team will be expected to have, or to acquire, that training which would qualify him as a Helping Teacher. In-service training should be provided in this respect. This reading person will work with those children in the group of 100 who would normally go to a Helping Teacher. Utilization of team members will be determined by the team. For instance, one team may function as completely departmentalized; while in another, each teacher may operate as though in a self-contained classroom. However, the rationale and decision on the teacher's role should at least be based on sound logic, as it relates to the philosophy and educational process of <u>this</u> school. A pertinent question which should be answered might be:

> Does our plan provide better opportunity for real flexibility in such areas as time schedules, activities, use of materials, grouping, and children's and teachers' interests?

It would appear that some patterns would be more effective than others in meeting the needs of the children in this school. The pattern described in the next few paragraphs seems effective, logical

MODEL OF EXPANDED CLASSROOM CONCEPT

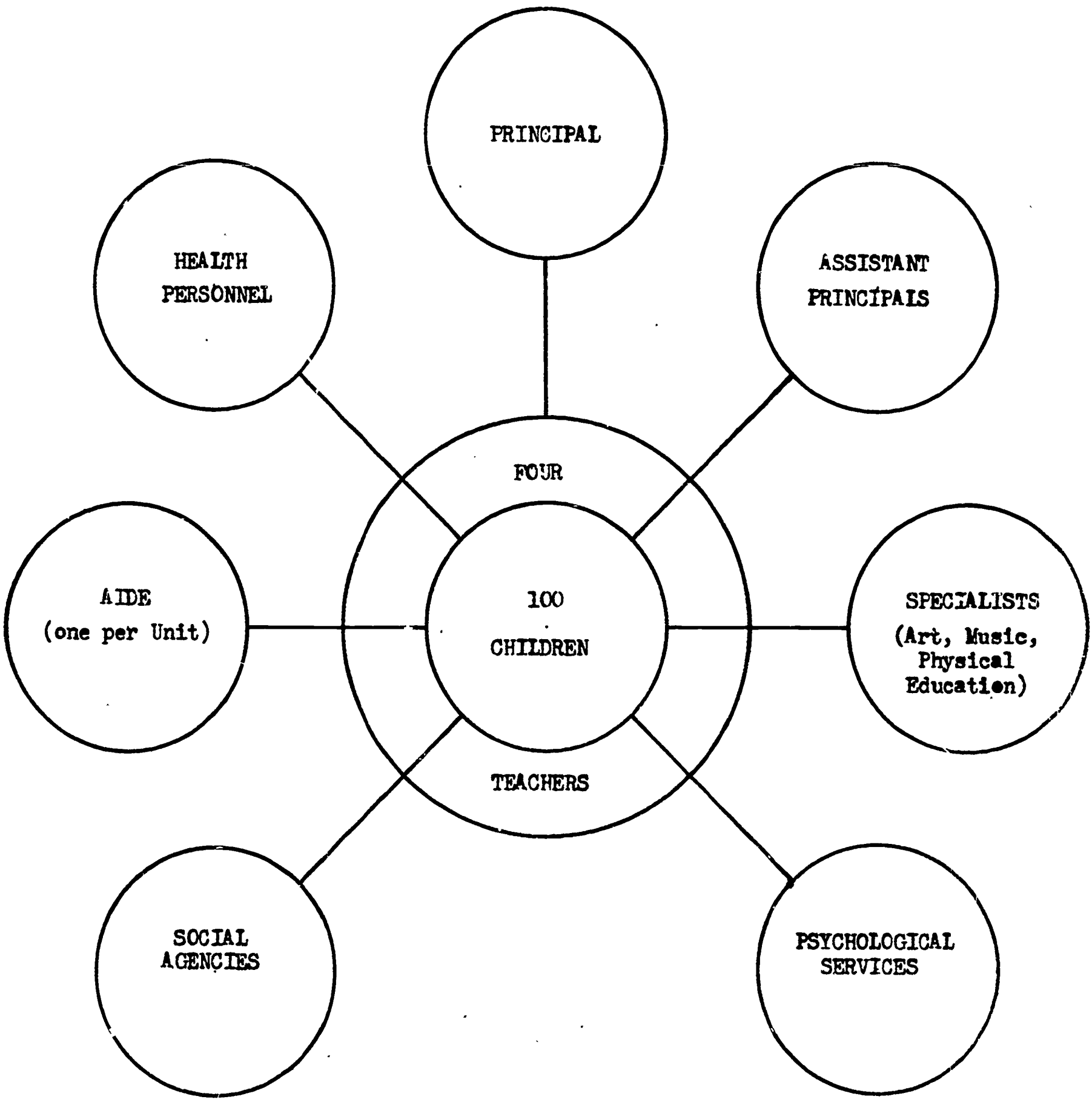


Fig. 1

and workable.

Team Planning

Given a specific subject area and the curriculum guide to help, the team as a group would determine what general content areas would best be taught to acquire certain skills and concepts. In fact, the objectives themselves could well be within the province of the team, particularly as far as determining priority and emphasis is concerned. The general approach as well as how the goals could best be accomplished would also be a group determination.

A logical "next step" in the planning might include decisions on what part each teacher would play in the total program. How he carried out his role would be his decision. Final steps in the planning stage would include discussions on ways of meeting the needs of individual children and of deciding how to evaluate their progress. It is clear that children will need to be grouped and regrouped frequently; and that teachers on the team could possibly be working with from one to one hundred children at varying times during the day.

The primary resource person available to help the team in their decisions on curriculum would be that member of the team who had responsibility for the area under discussion and the appropriate city coordinator or supervisor. Further resource persons could be available to the teams, if one person in the school per subject (i.e. math, science, social studies, language, reading) were trained as a specialist in that subject. He could serve as a team member and regular teacher for part of the time. He would be provided non-teaching time to work with the children and teachers from other teams in his area

specialty. He would also be the school representative on the appropriate city curriculum committee. The use of secondary teachers as resource people should be explored as a possibility also.

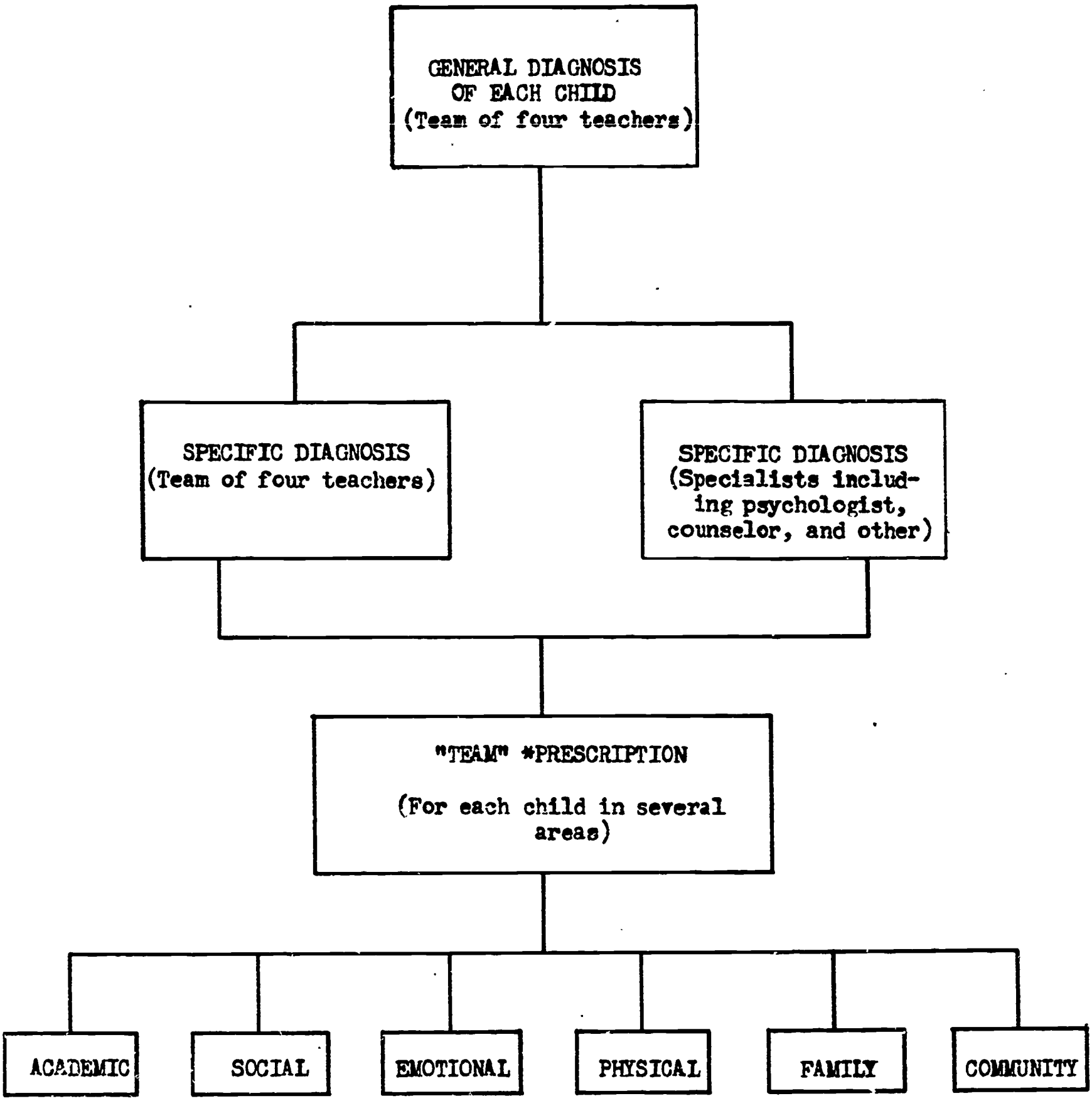
The use of specialists (city supervisors and school specialists) would be determined by the team. The team may request aid in planning, acquiring materials, and developing new techniques. They (the team members) also may ask that the specialist teach the children in the area to be studied.

Pupil Diagnosis and Prescription

The Committee has taken the position that the best education for children in the North End-Brightwood School will be that which is designed for and directed toward the individual learner. The degree to which this program helps the individual achieve appropriate goals relative to his ability, will be the degree to which it is successful. Special emphasis will be placed on developing individual independence and initiative. The specific responsibility of the teacher team will be to plan goals and experiences for each child which are particularly suited to his learning rate and style, interests, goals, and abilities. This requires that a very specific diagnosis be made of each child. The "Expanded Classroom Concept" represents the framework within which such a diagnostic process could take place. A flow chart showing the process is provided in Fig. 2.

The general diagnosis of each child will be made, initially, by the team of four generalists. It would be based on group test results in achievement and ability. All information available in the cumulative folder, from all sources should be considered in this

PROCESS of DIAGNOSIS and PRESCRIPTION



* "TEAM" in this sense includes all persons involved in the diagnosis.

Fig. 2

initial evaluation. The four areas of information which should be available in each child's folder when he arrives at the North End-Brightwood School from Grade three are:

1. His record of school performance and behavior.
2. A carefully structured teacher rating scale which will provide both an academic and social profile as well as comments on his out of school environment.
3. A group intelligence test, preferably the Kuhlman-Anderson or a Schlossen. It is to be hoped that the Lorge-Thorndike will not be used for these children.
4. Achievement tests such as the Iowa, the Gates Reading, and the California Diagnostic Arithmentic Test.

This material which will sometimes include reports from Bureau of Pupil Services staff where the case has been referred should provide the basis for a fairly sound judgement about the child.

The specific evaluation would "zero in" on specific needs, strengths, weaknesses, etc. in such areas as curriculum, personality, and interests as they relate to the objectives and goals to be achieved. It is at this point that specific decisions (prescriptions) can be made for most children with regard to experiences which are considered to be most appropriate.

For some children, the team may feel that much more specific information is necessary to provide an adequate prescription. In this case, specialists will be called upon to provide specific information and judgement which will help complete the diagnostic process. This specific information may involve personality, emotional problems, stability, perceptual handicaps, etc. Testing at this level will be

individual, and would include the administration of the Binet, or Wechsler and such other tests as the special services team feel to be useful.

After all necessary information is acquired, the augmented team will prescribe what experiences will be most advantageous to that particular child. The prescription could also include recommendations relating to the child's environment, both in and out of school. There are several possibilities for individualizing the prescription. Some are listed for the purpose of illustration:

1. The time spent in an area of content may be varied.
2. The team may vary the sizes of the groups or the combinations of pupils and teachers.
3. Programmed materials may be used.
4. Varied texts and materials such as I.P.I. and SRA and those prepared by teachers may be selected.
5. There can be a choice of who will teach the child (himself, another child, a regular, remedial or special teacher, aide, parents).
6. There is a choice in the kinds of materials (for instance concrete or abstract).
7. There are many different types of media from which selections can be made.
8. The location where the learning may take place, may be important at times.

Whatever the decisions, the child should have some part in their formulation.

Diagnosis and prescription are only parts of the total teaching-

learning process. A very much simplified paradigm of this process, as projected by the Committee, has been developed in Figure 3. The evaluation process will indicate whether the initial objectives have been achieved, or whether new approaches are necessary. The results of the evaluation will determine what further action should be taken.

Vertical Movement of Children

Children will remain in the basic unit of 100 children for the total time they are members of this school. Normally this will be from one to three years. In some cases, children will spend four years in the North End-Brightwood School before they are considered ready to move to Junior High. Each child's progress will be continuous and differentiated according to his needs and abilities without the artificial barriers of grade levels to hamper him. Further planning and study will be necessary to develop this process to its fullest extent.

The decision to transfer a child to Junior High School will be determined individually. The criteria will be similar to those used at the present time; such as, age, academic achievement, and social and emotional factors. Ways of making the transition a smooth and uninterrupted one are currently being explored at the Junior High level.

Implications for Facilities

It is readily apparent from the recommendations on grouping, that children will need to be grouped and regrouped often during the day in order to meet their needs adequately. This process can be time consuming, if attempted within the framework of the conventional "egg

TEACHING - LEARNING PROCESS

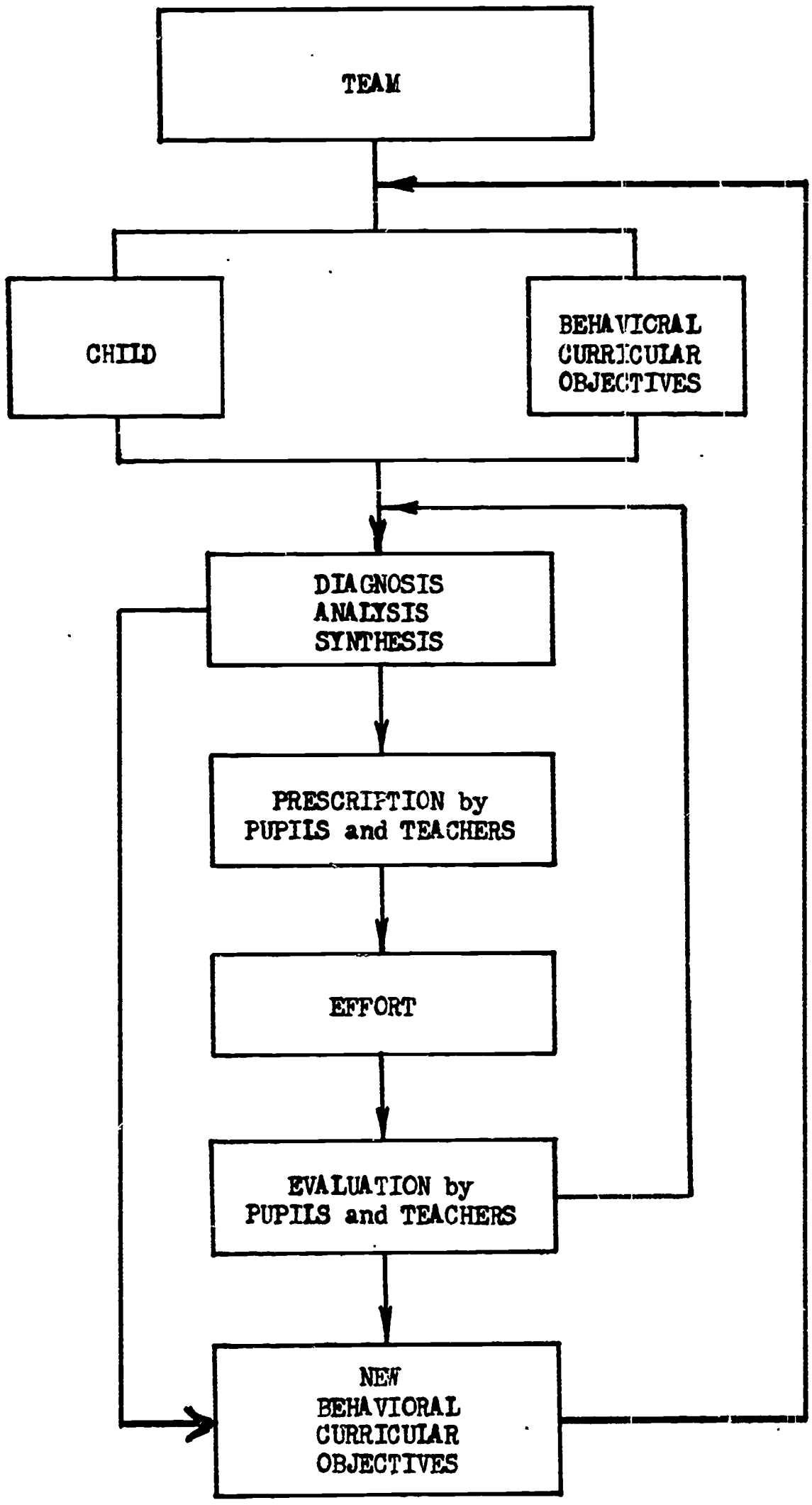


Fig. 3

crate" school. Much time can be lost in going from room to room. In some cases, providing adequate supervision can be a problem.

The Committee believed that these problems could be solved to a great extent by eliminating the walk between rooms. The members visualize one large room for each 100 children as a solution; providing factors such as acoustics, privacy, etc. can be maintained.

This concept is not new. Educational Facilities Laboratories, Inc. has made a comprehensive study of the feasibility of "open-space schools", and believes them to be practical.[57] They testify to their practicality by stating that, in California, seventy-five per cent of all school construction planned since 1962 contains some open space, and that twenty per cent of the new schools contain nothing but open space.[58] Studies by EFL indicate that the problems of large numbers of children in open spaces are eliminated by proper design and construction. A visit by Committee members to a school utilizing classrooms of 3,600 square feet each (East Farms School, Farmington, Conn.) provided an opportunity to observe children in an "expanded classroom". There was enthusiastic approval by all members.

Possible Time Schedule

As the "Expanded Classroom Concept" began to evolve and criteria were determined, it became evident that some effort was necessary to determine if a workable schedule could be devised. A list of primary

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[57] Report from Educational Facilities Laboratories, Schools Without Walls, Educational Facilities Laboratories, Inc., New York, 1966.

[58] Ibid., p. 7.

requirements was developed. The Committee determined that the schedule must provide:

1. Adequate planning time each day for the teams of generalists and specialists.
2. Opportunity for intra-team planning between specialist and generalist teams.
3. A lower pupil-teacher ratio in reading.
4. A large block of time for reading.
5. Large blocks of unstructured time for correlative units planned and implemented by the team.
6. At least forty-five minutes of physical education each day.

A schedule which appears to meet these requirements has been developed and will be found in Appendix C. This tentative listing provides for six fifty-minute periods per day with the exception of Tuesdays, when dismissal at 2:30 P.M. requires that each period be shortened to forty minutes. The schedule is considered to represent a module of two weeks. Each child will have art or music on alternate days. The schedule followed on Mondays by Teams A and B is described as illustrative of that followed by all teams.

The 200 children in Teams A and B will go to physical education for the first fifty-minute period on Monday while their respective teacher teams use this time for planning. The block of time from 9:50 A.M. to 1:35 P.M. is unstructured. The Teams will utilize this time for mathematics, science, spelling, penmanship, and social studies. A one hour lunch hour is provided from 11:30 A.M. to 12:30 P.M.

From 1:35 P.M. to 2:25 P.M. fifty children from Team A will go to art and fifty from Team B will go to music. The remaining fifty children in each team will be taught reading during this time by their respective teacher teams. The process is reversed from 2:25 P.M. to 3:15 P.M., with those who had music and art having reading, and those who had reading having music and art.

Each team of generalists is free of teaching responsibility for fifty minutes of planning time per day. The team of physical education specialists is scheduled for planning time between 1:35 P.M. and 2:25 P.M. each day. Two members of the art and music teams respectively have fifty minutes of planning time from 10:40 A.M. to 11:30 A.M. The remaining members of these two teams have from 12:30 P.M. to 1:35 P.M. for their planning time. One-half hour from 8:30 A.M. to 9:00 A.M. has been suggested as a time for the intra-team planning of generalists and specialists.

It should be emphasized that the schedule described is only intended to show that a plan can be devised to encompass the criteria suggested by the Committee. It may well be that a more effective schedule can be devised. Further study should be devoted to this possibility.

A Sample Expanded Classroom

To determine the implication of the expanded classroom concept for grouping, the Committee decided to take a sample of one hundred children selected randomly from the three feeder schools, and organize them for instruction as recommended in the proposal. This sampling, although not strictly scientific in nature, was felt to be representative of the probable composition of the North End-Brightwood School. One hundred fourth, fifth and sixth graders from Brightwood, Lincoln and Carew Street Schools were selected for the random sample. This group of children and their four teachers will be considered Team A for the purposes of this sub-section.

In order to establish flexible grouping arrangements, certain specifics were needed for each child: name, age, sex, race, reading and math achievement scores, special abilities or disabilities, outstanding personal traits, and teachers' evaluations. With this information it was felt that children could be initially grouped and regrouped to achieve maximum results from their learning experiences. In the reading and math areas, homogeneous grouping based on achievement levels was thought to be the most effective way for a child to master the necessary skills. In other areas, such as social studies, science, art, and music, heterogeneous grouping based on interests, attitudes, and abilities would offer a child multiple opportunities for interaction with children of varying ages and levels of experience. In addition, the flexibility of this organization would provide for team or peer learning, individual programmed instruction, independent study, and multi-teacher contacts.

Procedure:

Home station

Children in Team A were randomly assigned in groups of twenty-five to each of the teachers in the team to give each child a "home base." The teacher in charge of each group of twenty-five was to be responsible for checking attendance, opening exercises, dismissal, record keeping and follow-up for these pupils. This teacher would also give instruction to this group in some subjects.

Reading

Pupils' reading achievement scores were examined and listed from lowest to highest. The individual scores were taken from the Iowa Tests of Basic Skills which had been administered previously. Groups were established with the following limits:

	Grade Equivalents
Group a	1.6 - 3.0
Group b	3.1 - 4.0
Group c	4.1 - 5.0
Group d	5.1 - 8.0

See chart #1

Because the Committee felt that small groups were necessary for reading instruction, scheduling was arranged so that only one-half of the total Team A children would receive instruction in this area at one time (one to 12 pupil-teacher ratio for reading). To make this possible, group a was subdivided into groups a^1 and a^2, group b into b^1 and b^2, group c into c^1 and c^2, and group d into d^1 and d^2. All "1" groups were scheduled to read during one period while "2" groups were assigned to specialists in music or art. The following period scheduled the "2" groups for reading with the "1" groups for music or art.

CHART #1

READING

PUPIL NUMBER	AGE	ACHIEVEMENT	RACE	COMMENT
		a1		
6	10	1.6	P.R.	
12	11	2.0	W.	
5	10	2.3	W.	
4	10	2.4	N.	
2	10	2.6	W.	
1	9	2.7	N.	
8	11	2.7	P.R.	LANGUAGE BARRIER
10	11	2.8	W.	BEHAVIOR PROB.
97	12	2.6	P.R.	LANGUAGE BARRIER
		b1		
35	10	3.1	W.	VERY EMOTIONAL
39	10	3.1	W.	
21	10	3.1	W.	
60	11	3.2	W.	
23	11	3.2	W.	RESTLESS
15	10	3.2	W.	
16	10	3.2	W.	
40	9	3.3	N.	
34	11	3.3	N.	
18	10	3.3	W.	
22	11	3.4	N.	DISCIPLINE PROB.
14	9	3.4	N.	
41	9	3.5	W.	
19	9	3.6	N.	
		c1		
57	14	4.1	P.R.	DISCIPLINE PROB.
52	12	4.1	N.	
65	14	4.1	P.R.	
28	12	4.1	P.R.	
27	12	4.1	W.	VERY AGGRESSIVE
64	10	4.2	W.	
63	14	4.3	P.R.	
49	10	4.3	N.	
32	13	4.3	W.	OFTEN TRUANT
24	12	4.4	W.	
73	11	4.5	W.	
26	11	4.5	W.	
30	13	4.5	N.	POOR ATTITUDE
94	12	4.5	P.R.	
		d1		
53	11	5.1	W.	
68	10	5.1	W.	
69	12	5.2	W.	POOR SELF-CONTROL
59	13	5.2	P.R.	CAPABLE

PUPIL NUMBER	AGE	ACHIEVEMENT	RACE	COMMENT
		a2		
7	11	2.7	P.R.	LANGUAGE BARRIER
9	11	2.8	P.R.	BEHAVIOR POOR
3	10	2.8	W.	CAPABLE
25	12	2.9	W.	DEFIANT
11	11	3.0	N.	
46	14	2.8	P.R.	LANGUAGE BARRIER
13	12	3.0	N.	
		b2		
43	13	3.6	P.R.	
100	11	3.6	W.	GOOD STUDY HABITS
48	11	3.6	N.	
51	13	3.6	W.	
98	13	3.6	P.R.	
58	13	3.6	W.	BEHAVIOR PROB.
17	10	3.6	N.	
42	9	3.6	N.	
95	11	3.7	P.R.	
37	12	3.6	P.R.	
20	11	3.7	W.	
70	12	3.8	N.	
38	11	3.9	P.R.	
44	12	3.9	W.	
36	11	4.0	W.	
62	12	3.9	P.R.	
71	15	4.0	P.R.	LANGUAGE BARRIER
		c2		
72	11	4.6	W.	DISTURBS OTHERS
67	11	4.6	W.	POOR WORK HABITS
66	11	4.6	W.	TEMPERAMENTAL
47	12	4.6	W.	POOR EYESIGHT
45	12	4.6	N.	
74	11	4.7	W.	
76	11	4.7	W.	
75	13	4.7	W.	SEEKS ATTENTION
29	12	4.7	P.R.	
55	11	4.8	W.	
61	11	4.9	P.R.	
56	11	4.9	W.	
31	13	5.0	W.	DISCIPLINE PROB.
		d2		
33	13	5.9	W.	
88	11	5.9	W.	
80	12	6.0	W.	
83	10	6.1	W.	GOOD WORK HABITS

CHART #1 CONT.

PUPIL NUMBER	AGE	ACHIEVEMENT	RACE	COMMENT
86	11	5.2	W.	
77	15	5.3	P.R.	GOOD STUDENT
79	12	5.4	W.	POOR CONTROL
87	13	5.5	W.	
50	11	5.6	P.R.	
84	13	5.7	W.	
78	11	5.7	W.	LAZY
82	11	5.9	W.	
96	12	5.9	P.R.	
81	11	6.2	W.	WITHDRAWN
90	12	6.4	W.	
54	11	6.4	N.	
91	11	6.6	W.	
85	12	6.7	W.	
92	11	6.8	W.	
89	11	7.0	W.	
93	12	8.0	N.	GOOD IN ALL AREAS

Children in the lower achievement levels in reading (a,b) would concentrate on decoding skills with some instruction in the work study skills; while those children who had successfully mastered the decoding skills would concentrate on work study skills with review in decoding (c,d).

The team using the basal Houghton Mifflin program in groups A and B would attempt to individualize as much as possible through sub-grouping and the use of additional materials, such as Individually Prescribed Instruction. A program with emphasis on study skills (Harper and Row) would be used with groups c and d. The team member whose strength and interest was in the reading area would work with the lowest groups as a helping teacher to do remedial work. A reading clinician would be necessary for severely handicapped children.

Math

Math groups were organized in the same manner as the reading groups. The groups established were as follows:

Group a	2.1 - 3.2
Group b	3.3 - 4.2
Group c	4.3 - 5.3
Group d	5.4 - 7.8

See chart #2

The group with the lowest achievement was kept smaller than the others to provide for more individual instruction. In math, as in reading, there was the possibility of sub-grouping within the group. Independent work in Singer's Sets and Numbers would provide for individual differences and allow for different rates of learning.

CHART #2

MATH

PUPIL NUMBER	AGE	ACHIEVEMENT	RACE	COMMENT
		a		
6	10	2.0	P.R.	
21	10	2.5	W.	
14	9	2.5	N.	
5	11	2.5	W.	
7	11	2.7	P.R.	
8	11	2.8	P.R.	
4	10	2.8	N.	
10	11	2.8	W.	EMOTIONAL
11	11	2.8	N.	
18	10	3.0	W.	
9	11	2.8	P.R.	
20	10	2.9	W.	
23	11	3.0	W.	
3	10	3.0	W.	
19	10	3.0	N.	
22	11	3.2	N.	DISCIPLINE PROB.
		b		
13	10	3.0	N.	POOR BEHAVIOR
17	10	3.3	W.	
15	12	3.3	N.	
97	12	3.4	P.R.	LACKS CONFIDENCE
24	12	3.4	W.	
12	11	3.4	W.	POOR HEALTH
2	10	3.4	W.	
16	10	3.4	W.	
1	9	3.4	N.	
40	9	3.6	N.	
41	9	3.6	W.	
33	13	3.6	W.	
25	12	3.6	W.	
44	12	3.8	W.	DEFIANT
35	10	3.8	W.	EMOTIONAL
34	11	3.8	N.	
32	13	3.9	W.	
100	11	3.9	W.	
36	11	4.0	W.	
38	11	4.0	P.R.	LANGUAGE BARRIER
37	12	4.0	P.R.	LANGUAGE BARRIER
28	12	4.0	P.R.	
27	12	4.0	W.	
29	12	4.1	P.R.	
39	10	4.1	W.	
42	9	4.2	N.	
96	12	4.2	P.R.	

CHART #2 CONT.

PUPIL NUMBER	AGE	ACHIEVEMENT	RACE	COMMENT
		c		
26	11	4.2	W.	
45	12	4.3	N.	
43	13	4.3	P.R.	LANGUAGE BARRIER
94	12	4.3	P.R.	
98	13	4.3	P.R.	
46	14	4.3	P.R.	LANGUAGE BARRIER
30	13	4.4	N.	POOR ATTITUDE
31	13	4.4	W.	DISCIPLINE
47	12	4.4	W.	POOR EYESIGHT
48	11	4.5	N.	
50	11	4.6	P.R.	
49	10	4.6	N.	
51	13	4.6	W.	
99	9	4.6	P.R.	
55	11	4.8	W.	
54	11	4.8	N.	
53	12	4.8	W.	
52	12	4.8	N.	
56	11	4.8	W.	
95	11	4.8	P.R.	LANGUAGE BARRIER
60	11	5.0	W.	
58	13	5.0	W.	BEHAVIOR PROB.
59	13	5.0	P.R.	
61	11	5.1	P.R.	MOODY
62	12	5.1	P.R.	
64	10	5.2	W.	AGGRESSIVE
67	11	5.2	W.	
66	11	5.2	W.	TEMPERAMENTAL
68	10	5.3	W.	
		d		
51	14	5.1	P.R.	
57	14	4.9	P.R.	BEHAVIOR PROB.
65	14	5.2	P.R.	
69	12	5.4	W.	BEHAVIOR PROB.
85	12	5.4	W.	
79	12	5.4	W.	POOR CONTROL
70	12	5.6	N.	
72	11	5.6	W.	
71	11	5.6	P.R.	LANGUAGE BARRIER
78	11	5.7	W.	
73	11	5.8	W.	
81	11	6.0	W.	POOR WORK HABITS
86	11	5.8	W.	
89	11	6.0	W.	
80	12	6.0	W.	

CHART #2 CONT.

PUPIL NUMBER	AGE	ACHIEVEMENT	RACE	COMMENT
83	10	6.1	W.	
76	11	6.2	W.	
84	13	6.4	W.	
77	15	6.4	P.R.	
88	11	6.5	W.	
74	11	6.6	W.	
82	11	6.6	W.	
91	11	6.6	W.	
87	13	6.7	W.	
75	13	6.8	W.	
93	12	7.4	N.	
92	11	7.5	W.	
90	12	7.8	W.	

Daily Schedule for Team A

9:00 - 10:00 Social Studies and Language Arts

In the Social Studies section of the proposal, an explanation of the concept "families" was given. Family #1, Man and His Environment, including such concepts as culture, race, religion, community and society could be utilized by the team and developed as a unit. One teacher might introduce and motivate the unit in a large group situation. Each teacher would then work with the twenty-five children assigned to the home base to develop specific, relevant concepts and skills. The children would move into smaller working groups to do independent research and projects based upon interests and abilities. Regrouping should be done as the need arises. The showing of films and film strips would usually be done with the large groups. Sharing and culminating activities might involve either the whole cluster or possibly two clusters of fifty.

Language Arts has been included in this time because the team felt it would lend itself easily to the social studies. Note-taking, outlining, reporting, and creative writing are necessary skills for success in both subjects.

10:00 - 10:15 Spelling and Penmanship

The home base teacher would teach these subjects. Attempts would be made to individualize spelling through programming and peer learning.

10:15 - 10:40 Science

The team felt that the science program should include:

1. Elementary Science Study materials which provide opportunities for pupils to investigate, discover, and share their findings.
2. Large group introduction to basic concepts followed by small group or individualized research.
3. Laboratory work in small groups with demonstrations and experiments.

10:40 - 11:30 Reading for 50 children in groups a^1, b^1, c^1, d^1; the remaining children to go to art or music.

11:30 - 12:30 Lunch

12:30 - 1:35 Reading for a^2, b^2, c^2, d^2. Those who have had a reading period now go to art or music. Extra time has been provided during this period for children and teachers to prepare for the afternoon session.

1:35 - 2:25 Math groups according to achievement levels.

2:25 - 3:15 Physical Education with a specialist for the whole group.

Planning time for team members.

It should be noted that because of the multiple innovations which this school will provide, the daily schedule is quite rigid in order to offer a sense of security to both child and teacher. More flexibility in the program will be encouraged as the children and teachers become more accustomed to their new environment.

CHAPTER XIII

CURRICULUM

Art

The Planning Committee and Art Department personnel believe that the basic philosophy for teaching art in the Springfield elementary schools should remain unchanged in the North End-Brightwood School. The classroom unit should remain the prime source of motivation for art experiences. Each child will be accepted at his stage of development and motivated and encouraged to express himself creatively through a variety of media. He should be permitted to develop his skills and abilities in a manner consistent with his rate of growth and pattern of development. The Planning Committee believes that the North End-Brightwood School will provide unprecedented opportunity to develop this philosophy through special personnel, equipment, materials, and scheduling.

Activities involving industrial arts, fine arts, crafts, and home arts should be available to both boys and girls. Many units of study will provide a basis for correlation within the arts. Examples are: The Early Settlers - Industrial Arts: The children might make a useful item for the home as early settlers were required to do; looms, candleholders, benches, etc. Fine Arts: create useful ceramic ware,

weave material, build model log cabins, illustrate scenes from the life of the early settlers, etc. Crafts: making candles, wooden spoons, woven placemats, etc. Home Arts: sew an apron, cook a pumpkin pie, pickle eggs, etc.

Most classroom teachers do not have the special skills and talents needed to teach these areas skillfully. Some lack the interest. Helping teachers to acquire these skills through training has not always been effective. The Committee recommends that a team of four art specialists be a part of the North End-Brightwood staff to plan and teach this very specialized area. The special problems inherent in the materials used require that an aide be assigned to this team, also.

Using the classroom activities as the source of motivation, this team of four art specialists will cooperatively plan art activities with the teams of generalists. These activities should be appropriate to both objectives of the art curriculum and the classroom. Although the basic responsibility of the unit will rest with the team of generalists, ways of correlating art and the unit as well as objectives will be discussed and decided cooperatively by both specialists and generalists. Art objectives and related skills along with determination of appropriate procedures for their mastery will normally be determined by the team of specialists. Insuring that each child is provided with the opportunity to acquire comprehensive experiences in art and art media which are suitable for his abilities and interests is a basic responsibility of this team.

To sum up: There will be two basic areas of cooperative planning; intra-team (correlation of unit and art activities), and inter-team (correlation of one art activity with another).

It is conceivable that it may be desirable to develop some specialization within the art team. One may be especially equipped to provide expertise in industrial arts, another in home arts, etc. The most effective utilization of the team should be the decision of its members.

A list of a few art techniques is provided to indicate the variety possible in this program:

Drawing	Pencil, crayon, pen & ink, brush & ink, marking pen, chalk, scratch board, yarn
Painting	Poster paint, watercolor, oil, mixed media, colored ink, finger painting, enamels, wax resist
Lettering	Pen & ink, brush & paint, cut paper letters, upper case, lower case, script, descriptive lettering
Printing	Linoleum block, junk, silk or similar material, stenciling, monoprints, cardboard, spray painting, spatter brush
Weaving	Hand, cardboard loom, heddle bar, peacock loom, 2 harness looms, paper placement
Stitchery	Using a variety of materials for a variety of purposes, learning stitches and knots
Ceramics	Pinch pot, slap, coil, textured coil, casting, potters wheel, underglazing, overglazing
Papier Mache	Puppets, marionettes, animals, masks, figures, objects, etc.
Color	Theory, science, contrast, harmonies, mixing, psychological use, symbolic, lighting
Collages	Using a variety of materials for a variety of purposes
Mosaics	Using a variety of materials for a variety of purposes
Design	Basic theory, techniques, application, posters, bulletin boards, signs
Mobiles	Using a variety of materials for a variety of purposes; learning balance, rhythm, movement, craftsmanship
Stabiles	Constructions using a variety of materials, for a variety of purposes, craftsmanship

Dioramas	Shadow boxes, use of various materials, 3 dimensional design, foreground, background
Sculpture	Papier mache, clay, wood, plaster, soap, wire, paper
Tissue Paper Craft	
Panorama	Table top arrangement of materials - ex. Sturbridge Village
Sand Casting	Clay casting
Copper Enameling	Jewelry, dishes
Glass Melting	
Wood Craft	Letter openers, chip carving, ceramic tools
Map Making	... of opaque projector, flour & salt, papier mache, ...st & wheat paste, corn starch
Charts & Graphs	
Assemblages & Collections	Shells, leaves, grass, stones, seeds, pine cones, butterflies, feathers
Stage Craft	Lighting, props
Murals	

The Committee recommends that the majority of these and other art activities be conducted in special art rooms. It is also probable, however, that there will be times when some art activities will take place in the regular classrooms under the direction of an art teacher, the general teacher, or both.

Specifications for the special rooms will be found in some detail under "Educational Specifications."

Mathematics

The mathematics program at the North End-Brightwood Community School should follow the laboratory approach. The youngsters who will come to this school, although their grade placement is four through six, will possess ability and experiential levels which would be equivalent to grades two through seven. An old Chinese proverb which goes: "I hear and I forget. I see and I remember. I do and I understand." seems particularly appropriate to these youngsters. The laboratory approach will permit the youngsters to participate in meaningful arithmetic learnings and experiences.

In order to implement such a program, large quantities of materials would be necessary for the youngsters to work with. Such materials would include: water, sand, pipe cleaners, construction paper, paste, scissors, string, simple tools, wood, wire, etc.

The mathematical learnings and experiences presented to the youngsters should be associated with activities which are of interest to them, in order to provide a stimulus or to motivate them positively in mastering these learnings and experiences. Such activities could be from school, community, church, sports, leisure, etc. The learnings must be tied in with contemporary practical applications. The use of electro-mechanical calculators can be an aid to computational experiences. The youngsters could use a flow-charting approach to calculations, thus assuring the students of regular success and implanting computational processes in an interesting, effective manner.

The basic program should be individually oriented. Every effort

should be made to establish a spectrum of learning units which would permit youngsters to start at any point of existent achievement, and proceed at whatever pace the youngster is capable of, to whatever level he or she may attain under the guidance and stimulation of the instructional staff. Such a program would necessitate a continuing testing program. Each youngster would participate in a spiralling series of prognostic, achievement, and follow-up tests to insure the individualization of his mathematical learning experiences.

The organization of the youngsters into groups of 100 with four teachers responsible for their program of learning experiences, exclusive of physical education, art, and music, lends itself particularly well to instructional activities geared toward indiviualization. One or two teachers plus aide(s) can work with youngsters in small groups on special problems, while the rest of the teachers plus aide(s) circulate among the rest of the group to give assistance where needed on prescribed activities. As mentioned earlier, the mathematical experiences should be tied in with interests. Concepts and techniques should be broken down into small blocks or units, with appropriate activities geared to individual mastery, with opportunities for maintenance. Materials available from Xerox, Educational Guidelines, and Encyclopedia Brittannica are aimed at individualization of instruction and give opportunities for fact and technique maintenance. Other materials could be developed within the group itself for duplication via ditto, mimeograph, or Itek. Materials such as those produced by Appleton-Century-Crafts for I.P.I. use would be very useful if available without becoming enmeshed with Research for Better Schools.

In addition to the printed or duplicated materials, a large amount of teaching devices and aids should be present in each hundred-student complex. This would include: counting frames (classroom and individual), fraction pies and bars, number rods, etc. Milton Bradley, Science Research Associates, Edu-Kaid, Creative Playthings, etc, produce the latest in teaching devices. A perusal of their catalogues will provide an endless list of suitable aids.

Social Studies

Relatively speaking, it is only recently that the social studies have become embroiled in the criticism and introspection which have been going on in other areas of the curriculum for some time. More and more teachers, administrators, college professors in the disciplines (anthropology, geography, history, political science, sociology, etc.) and the public are becoming dissatisfied with the content in social studies at all levels. There is a growing conviction that social studies which isolate or ignore the interrelationships of all the disciplines and their structure are unacceptable.

There appears to be a general implication that the appropriate approach to social studies can and should be made through dialogue developed among the experts in the various social science disciplines and practitioners in the classrooms. (Strangely enough, the initial impetus appears to have come from the social scientists.) The result has been such that, to this writer's knowledge, every major social studies program developed recently has included various social scientists as an integral part of its planning team.

At the present time considerable effort is being expended on discovering and defining the structure of each of the social science dis-

ciplines and meshing these structures into a social studies curriculum which is logical, sequential, and cumulative. The general approach has been to build a structure of basic ideas or "concepts" and to select that content which seems to serve best in exploring these basic ideas. Price[59], Director of the Social Studies Curriculum Center at Syracuse University asked social scientists to identify underlying integrative concepts in their disciplines. A list of eighteen substantive concepts were distilled from those submitted. They are:

1. Sovereignty of the nation-state in the community of nations
2. Conflict-its origin, expression, and resolution
3. The industrialization-urbanization syndrome
4. Secularization
5. Compromise and adjustment
6. Comparative advantage
7. Power
8. Morality and choice
9. Scarcity
10. Input and output
11. Saving
12. The modified market economy
13. Habitat and its significance
14. Culture
15. Institution
16. Social control
17. Social change
18. Interaction

An N.D.E.A. Social Studies Institute was sponsored by the Springfield Public Schools in the summer of 1967 to begin the initial development of an enlightened curriculum for the metropolitan area. Assisted by a variety of consultants from the social science disciplines, the members of the Institute began by addressing themselves to the development of general concepts. The group suggested the following as major concepts:[60]

State	Liberty	Scarcity	Environment
Nation	Equality	Price-cost	Adaptation
Government	Community	Property	Development
Authority	Society	Distribution	Causation

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[59]Roy A. Price, Warren Hickman, and Gerald Smith, "The Curriculum: Content", in New Frontiers in the Social Studies: Action and Analysis, by John Gibson, Citation Press, New York, 1967, pp. 50-68.

[60]Report of the "Greater Springfield Social Studies Curriculum Institute", Summer 1967, Springfield, Mass., p. 13.

Law	Culture	Production	Leadership
Sovereignty	Race		Conflict
Power	Religion		
Justice			

This list was followed with suggested content on a K-12 basis which would readily lend itself to teaching the concepts at appropriate levels of sophistication.

The question of how to make social studies relevant to the child and his future also looms large among educators at all levels. For example, Fantini[61] questions whether we school people are really serious about dealing with the basic concerns of our society. He believes that to be relevant, the curriculum objectives must include more than those which are directed toward the attainment of academic skills and subject matter content. He suggests that two other sets of objectives must be added: one that relates to developing latent talents and abilities (personal development); and a second which relates to "the issues and problems of social action that are personally related to the students"[62] (social objectives). This social action approach contrasts with the more academic, passive, and traditional treatment of Miel[63] and Estvan[64].

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[61]Maria D. Fantini and Gerald Weinstein, "Social Realities and the Urban School", a paper presented at the ASCD Conference, Atlantic City, N.J., March 1968.

[62]Ibid. p. 26.

[63]Abie Miel, "Societal Demands and Changing Social Problems", in Social Studies in the Elementary Schools, John U. Michaelis, Ed., National Council for the Social Studies, Washington, 1966, pp. 17-25.

[64]Frank J. Estvan, "Childrens Social Perception", in Social Studies in the Elementary School, John U. Michaelis, Ed., National Council for the Social Studies, Washington, 1966, pp. 25-32.

Recommendations

The Committee generally accepts and endorses the direction being taken in the development of social studies curriculum. It is felt that a conceptual framework which teachers and children can use to determine content is desirable and workable. Because the proposals for the North End-Brightwood School involve organization and staffing patterns which are unique for Springfield, the Committee recommends some change in the approach to social studies from that taken by institute participants. The features of the proposed staffing and organization of this school which are pertinent to the teaching of social studies are:

1. Most children will be with the same group and team for three years; therefore, content should not be repeated each year.
2. The classes will be non-graded, so there will be no need to compartmentalize concepts or content into grades.

The committee recommends that the concepts previously listed be organized as "families". Those which seem to have the most relatedness would be considered a family. A gross grouping might be:

1	2	3
Society	Scarcity	State
Community	Price-cost	Nation
Race	Property	Government
Culture	Distribution	Authority
Religion	Production	Law
Environment		Sovereignty
Adaptation		Power
Development		Justice
		Liberty
Causation 1, 2, 3		Equality
Leadership 2, 3		Conflict

After refinement of these concepts and the development of sub-

concepts, a variety of content areas could be suggested for each family. Teachers would then select that content which seemed most appropriate for the group at that time. A different family of concepts would be utilized each year by the team, although the team would be encouraged to draw from the other families as it deemed necessary. The fourth year, the team would return to the original group of concepts. A spiral curriculum would result if a complimentary approach were used in the primary grades and in junior high.

Children should be grouped within a study area according to individual interests, and each child's degree of sophistication in the social studies concepts explored. The "unit" approach currently used in Springfield should be continued. A significant difference in approach will be that the team of four teachers, with the help from specialized personnel, will plan and direct the unit. A possible approach to unit work with a large group of children will be discussed in the section on the random sampling of 100 children.

Implications for Future Planning

It is recommended that a curriculum committee study and develop the details of a program such as that described, with special emphasis on behavioral objectives and related content that are directly relevant to the child's interests, abilities, aspirations, and the social realities of his environment.

The Committee further suggests that consideration be given to placing additional emphasis on Puerto Rico, Canada, Greece, urban life and Negro history due to cultural and environmental backgrounds of the children likely to attend this school.

Reading

Children attending the North End-Brightwood School will fall into two large groups so far as their needs in reading are concerned: 1) those who have "broken the reading code" and have acquired other primary grade reading skills and 2) those who have yet to gain sufficient facility with the word recognition skills so that they have reasonable independence in reading. The two groups cannot be entirely separated, since there is no definite cut-off point for teaching decoding skills, nor do procedures such as library reading and literature study begin only after complete mastery of the decoding skills. However, for the purposes of the general discussion which follows, it seems desirable to consider the two groups separately.

For those children who have yet to master the mechanics of reading, the Committee recommends that the emphasis continue to be on "breaking the code." The importance of this emphasis for ultimate success is well documented by Chall in her recent survey and analysis of research on beginning reading. According to Chall[65]:

> .....the research from 1912 to 1965 indicates that a code-emphasis method - i.e., one that views beginning reading as essentially different from mature reading and emphasizes learning of the printed code for the spoken language - produces better results, at least up to the point where sufficient evidence seems to be available, the end of third grade.

When Chall uses the word "better", she is comparing the code-emphasis approach with the meaning-emphasis approach found in most standard basal reading programs of the recent past.

The Springfield public schools are currently using the Houghton

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[65]Jeanne S. Chall, Learning to Read: The Great Debate, McGraw-Hill New York, 1967, p. 307.

Mifflin basal reading series system-wide in the first three grades. It is the judgement of the Reading Department that this basal strongly reflects approaches to beginning reading found to be most appropriate and effective by Chall in her review of research. It is suggested, therefore, that the Houghton Mifflin method be continued for children in the North End-Brightwood School until their critical need for code emphasis has been removed. Since the majority of children who enter the school (children who enter from schools other than the Springfield public schools may be exceptions) will have started to learn the Houghton Mifflin method in their first years in school, it would seem to be inefficient and probably confusing to the children to shift to some other type of decoding procedure.

It is not essential that Houghton Mifflin materials be used exclusively: it is the method, not the books, that is important. It is suggested, therefore, that many different and fresh materials be used. Once the teachers understand the method thoroughly, almost any materials can be adapted for this purpose. The new Macmillan Decoding for Reading is one example. This is an audio-lingual program consisting of recordings and Readalong Lessons designed to reinforce the use of sound and context in decoding words. Other materials are coming on the market at a rapid pace, and, by the time it is necessary to purchase materials for the new school, there will be many more from which to choose.

By the utilization of the teaching personnel described in a previous section, it will be possible to schedule children, so that the pupil-teacher ratio for the teaching of reading will be approximately twelve to one for a fifty minute period each day. This ratio and time

should permit careful analysis of each child's reading problems and the provision of appropriate teaching materials and techniques to overcome his problem. When it is most efficient and children have mutual problems, the teacher will work with the group as a whole. At other times, much individual work can be done.

While the emphasis with this group of children should be on the decoding process, the children should also have experiences with literature. This may take one of several forms:

---the teacher's reading to the child and discussing the material with them.

---individual listening to literature on tapes followed by some activity which the child carries out independently. Tapes for this purpose are coming on the market. They can also be made locally.

---independent library reading. By the time children are at the primer level in the Houghton Mifflin program they can start independent, individualized library reading.

For those children who have achieved success with the primary grade reading skills and already have some independence in reading, the program will consist of the following:

---minor emphasis on the decoding skills for review and maintenance

---strong emphasis on study skills

---many experiences in the study of literature

---independent, individualized library reading

The work with the decoding skills may take the form of Individually Prescribed Instruction (IPI): each pupil doing only those parts of the work in which diagnostic testing shows that he is weak.

The major emphasis on study skills will probably be based in a study skills series, such as the Harper Row How-to-Read-in-the-Subject-Matter-Areas. It is necessary, however, that much work also be done

in the children's own subject area textbooks to insure the transfer of skills to practical situations. The difficulty of adapting the subject area material to the teaching of reading is recognized by the Committee, and has led them to suggest that basic teaching of these skills be done with a series set up for this purpose; such as, Harper Row.

Children need group experiences in the study of literature. It is here, more than anywhere else, that thegive-and-take of opinions are vital to the development of depth of reading. These children should have experiences in depth with carefully selected poetry, plays, etc., such as are found in any one of the good literature series now available; for example, the Harcourt, Brace and World Literature Readers.

The importance of reading for pleasure and general information cannot be over-emphasized. It appears increasingly difficult for most children to find the time to sit at home and read to the degree necessary for them to become lifetime readers. It is, therefore, necessary to provide the quiet time and place for this to happen at school. Furthermore, the ages of nine-ten-eleven-twelve represent the "golden" time for building this habit. With the cooperation of the teachers and the school librarian, much emphasis will be placed upon this kind of reading with informal and highly individualized guidance.

It is recommended, also, that a reading clinician be assigned to the North End-Brightwood School. With the time devoted to reading and the low pupil-teacher ratio, it is expected that all but the most serious reading problems can be handled in the regular classroom situation. However, there will be some children who will need intensive diagnosis and teaching by a specialist. It is suggested that this person might

play a dual role in the school: that of diagnostician and teacher of severely disabled children, and also that of consultant to the teachers in the school concerning techniques of teaching reading.

Summary

The essential areas of emphasis in reading are: "decoding" skills, study skills, literature, and library reading. Acquisition of the decoding skills comes first, for the child has no independence unless he has acquired these. Other aspects of reading are brought in as the decoding skills are mastered, with the study skills and library reading gradually assuming the primary emphasis.

Which aspects of reading will receive emphasis at any particular time will be determined by the results of the evaluation of individual children's needs. Areas of emphasis, materials to be used, teaching techniques, and distribution of time should be determined for each individual by the team of teachers. As the child develops greater self-reliance in reading, he, too, should play a part in the planning process.

Implications for Facilities

There should be provision for two small rooms for the reading clinician-consultant. One should be a testing-teaching room and the other an office-conference room. In the latter, the clinician will maintain samples of professional materials and confer with teachers and parents. In the classrooms themselves, provision should be made for listening facilities. It would appear that for reading, at least, no more than fifteen children would be using these stations at one time.

Language

Our civilization has reached a complexity which requires a literate population that can use writing and oral communication skills fluently and clearly. The challenge to education is to develop these skills to their optimum in all children. The difficulty in meeting this challenge stems from the obvious; that children enter school with different language capacities, but more important different language patterns. Most of these pre-school patterns are conditioned by environment. Regions, certain age groups, socio-economic level, and cultural and family background are some of the distinctive determining factors. In many cases, particularly in children from a low socio-economic environment, language patterns of any sort are poorly developed due to lack of opportunity and need to speak. In this milieu, actions are often substituted for words.

Traditionally, schools have attempted to change speech patterns which did not conform to what was commonly considered to be correct. Although this objective was, and still is desirable, the approach often left the child with feelings of inadequacy in this area. Because the emphasis was usually on correct grammar and pronunciation in speech, and on grammar and punctuation in writing, pupil creativity suffered in these areas.

Current thinking in the language area puts more stress on written and spoken thought than on the mechanics of communication. Position statements developed by teachers and writers at a recent conference are illustrative of this point of view. Participants at this conference believe that:

1. The grading of written work should be eliminated. A child's writing should be considered as an intimate revelation of his feelings and impressions; one to be respected.

2. Teachers must learn to accept the language of children without imposing arbitrary standards for usage that frustrate the free flow of expression. Early emphasis on correct usage can make the act of writing and speaking no more than an anxious, crippling exercise to many children.

3. Children should be allowed to invent a language by which they manage their own world. When children are encouraged to make uninhibited and imaginative use of their own verbal experience, their sensibilities will be more open to the power and sweeping language of stories, myths, legends and poems of the literary tradition.

4. No arbitrary limit should be placed on the range of experience of language used in the classroom. If children or teachers feel that words or references or ideas that are important to them must be censored or are "out of bounds" then the classroom itself can become a sterile and irrelevant place.

5. Writing must not be estranged from the other acts. Acting, drawing and dancing can, and should be used, in telling a story.[66]

The Committee is in agreement that the thought to be expressed, either oral or written is, by far, more important than the mechanics of its presentation. The Committee also believes, however, that the mechanics do have importance if the child is to develop language competence that will be an asset rather than a liability. Great care must be taken that creativity, self-concept, and the positive elements that exist in his initial language patterns are not destroyed in the process.

The probability of conflict between what is desirable and what exists represents the dilemma in teaching language. Fortunately, a committee representing all levels of education in Springfield is working on a revision of the current language curriculum. It is antici-

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[66]Herbert R. Kohl, "Teaching the Unteachable," New York Review, New York, New York, 1967, p. 61.

pated that the resultant curriculum will provide a rich resource for all teachers, and in particular for those in the North End-Brightwood School. Especially useful will be those materials, activities and teaching techniques which will promote fluent and voluminous oral and written communication within the classroom, thus pointing a way to a resolution of the dilemma.

Physical Education

The importance of a strong, planned program of physical education is recognized by the Planning Committee. The curriculum now in use in the public schools of Springfield is considered to be effective and appropriate for use in the North End-Brightwood School. Through the effective use of the present guide and supervisory help, the team of physical education teachers will be expected to plan experiences in the following areas of physical education, health and safety.

Physical Education

Self testing activities
Team sports
Rhythm and dance
Testing and conditioning

"Movement Exploration"* will be stressed in all areas.

Health

The body and its care, food, growth, diseases, and environment.

*This method represents a different approach to physical education. This approach utilizes the existing curriculum and emphasizes that learning occurs best in a free, secure, and comfortable environment. It provides a maximum amount of activity in a minimum amount of time. Through this method, curriculum is explored through problems presented to the child for his independent solution.

Safety

Traffic	Home	Community
Pedestrian	Bicycle	Fire
School		

It is suggested that the team concept be applied to the physical education, health and safety staff. This team of specialists would be expected to coordinate their efforts in interpreting, planning for, and carrying out an effective program designed to meet the individual needs of each child. Flexibility of program and grouping will be an essential element in all planning.

Five teaching stations will be required for this program. Two stations will be located in the gymnasium (large gymnasium partitioned into two sections). A third station will be located at the swimming pool. A fourth will be located in a "corrective" room. The fifth station will be for instruction in Health and Safety. Since the physical requirements of this station will be similar to those of the regular classrooms, and since there will be classrooms free at each period of the day, it is recommended that classrooms be used for this instruction. The corrective room will be used for the development of specific skills needed by atypical children. It will also be used frequently for instruction in the self-testing skills described in the current curriculum guide. A further use may include some experimental therapy designed to help children with learning disabilities related to academic achievement. The recommended physical requirements of the stations will be found under "Educational Specifications".

Staff Requirements

Staff requirements for such a program would include five physical

education teachers (one at each station), and one aide. The team might decide it could be more effective if some "in-team" specialization was developed. However, this would not be mandatory. The Committee believes that selected regular classroom teachers with some specialized training could achieve sufficient skill to become effective as specialists in Health, Physical Education and Safety.

The importance of intra-team planning and cooperation cannot be minimized. The teams of specialists and generalists must correlate curriculum and resultant activities to complement and strengthen the total experiences of each child.

Foreign Language

The Planning Committee for the North End-Brightwood School labored long and hard to determine the role of a foreign language in this school. The question was not "Should a foreign language be taught?," but rather "Which foreign language should be taught and to whom?"

The pupil population of this school will consist of a small proportion of children who will come from homes in which French is spoken. A few of these children will be bilingual. A larger proportion of children will be bilingual in English and Spanish. Some will speak no English. The vast majority of children (probably about 75%) will speak only English and many of these will have developed poor or limited language facility. To complicate the issue, a substantial number of children will also be having difficulty in acquiring the basic academic skills.

The Committee agreed immediately that those children who were to all intents and purposes non-English speaking, should learn English as a matter of top priority, regardless of any other factors. Ways of accomplishing this as rapidly as possible are currently being experimented within several schools. There is every reason to believe that the same equipment and basic approach used to teach any other language will also be effective in teaching English, and this can be accomplished more rapidly through the use of somewhat more sophisticated "hardware" than is currently used.

The problem of teaching a second language to children who can already speak English was not so easily resolved. The following questions are among those which were discussed:

1. Should one insist that a child be competent in academic areas before he takes time for instruction in a second language?
2. Should a child be fully competent in English before he is instructed in a second language?
3. Are there important advantages for children who are not college bound to have some bilingual competence?
4. Is the child who is slow in math and/or reading also likely to find learning another language difficult?
5. Conversely, does it always follow that a child who is proficient in academic areas such as math and reading learns a second language quickly and easily?
6. Should French or Spanish, or both, be taught?
7. What opportunities are available to a child for continuing French or Spanish in Junior and Senior High School?
8. What is the availability of qualified staff?
9. Should parents and children have a part in the decision of whether or not a child should take a second language?

Unfortunately, little could be found in the literature or research to help with the solutions to these questions. Inquiry reveals that the practices vary with the school systems. There appears to be a tendency to teach the language that reflects the culture of whatever group is proportionately the largest. For example, Spanish will usually be found to be the second language taught in the Southwest and in some schools in Spanish Harlem. There appear to be more school systems teaching a foreign language to the children in the upper ability ranges than those who are teaching all children regardless of academic ability. Availability of qualified personnel and budget considerations may be the

determining factors in this case, however. The Committee also took note of California's law requiring all children to study a foreign language in elementary school, and a pilot program in New York City where foreign language instruction will be offered to all children entering either grade five or grade six. Dr. Leo Benardo, Director of the Bureau of Foreign Languages for the New York City Schools has stated that he believes that Spanish should be taught to all children in the North End-Brightwood School. This opinion was based on information provided to him on the characteristics of the projected pupil population of this school. Springfield's Coordinator of Foreign Languages agrees that the language taught should be Spanish, but has indicated a concern that there may be problems created where other city elementary schools are teaching French; for example, children transferring from school to school.

Recommendations

Since there is no conclusive evidence which can provide the Committee with guidance in this area, it is recommended that a pilot program be initiated. The essential elements of such a program would include:

1. Teach Spanish to all children entering for the first year.
2. After the first year, those children who showed interest and/or promise would continue with Spanish.
3. Provide for articulation in Junior High with a choice at that time of either French or Spanish.
4. Build in opportunities for parents and others to learn Spanish also.
5. Utilize a maximum amount of individual materials in the form of tapes and language labs.

6. Explore the possibility that one teacher on each team have some competence in Spanish.
7. Regroup non-English speaking children each day for special instruction in English.

It may be that as the program develops, French could be offered to at least those children who transfer to the school with previous training in French.

The Committee recommends that this pilot program be evaluated through an authoritative research design in order that some of the unanswered questions mentioned previously can be resolved.

Implication for Facilities

There will probably be a need for somewhat more than a twenty-five to thirty position language laboratory, considering the number of children who will be learning a second language. Similar equipment with similar capabilities will also be needed for areas of individualization in the music curriculum. The recommended electronic pianos utilize the same type of equipment. The Committee, therefore, recommends that there be two laboratories, one of which will be adapted to the electronic pianos. The latter laboratory will be used for both music and language.

Music

The music curriculum should contribute to the art of living, the building of personal identity, and the development of creativity in the students attending the Brightwood School.

Specifically, the music curriculum will be concerned with the processes through which these children may develop musical concepts and may

grow in musical understanding, skill, and appreciation (judgements of value). It is assumed that the concern of the music specialists would include both human values and the integrity of subject matter which would contribute to them.

If the instructional program of music education is to be both musical and educational, it must be consistent with the nature, structure, and meaning of the subject matter to which it relates. Therefore, the subject matter should be organized in terms of concepts to be developed for and by the individual student. Concepts and musical behaviors would be developed and measured as the children listen to music, perform it, move to it, analyze and discuss it.

It is recommended that the music curriculum include the development of the following concepts:

1. Concepts about rhythm
2. Concepts about melody
3. Concepts about harmony
4. Concepts about form in music
5. Concepts about form of music
6. Concepts about tempo
7. Concepts about dynamics
8. Concepts about tone color

Composers and their works will necessarily play a most important role in the development of these various concepts in the music curriculum. The integrity of music as an art could not be maintained without full use of musical examples and lives of the creators of music.

The music teachers would be guided by a scope and sequence chart of conceptual learnings related to the elements of music. It would be their

responsibility to: (1) assess the degree of understanding of the children in relation to each of the elements of music; (2) select a level for each musical element which is appropriate to the current understanding and ability of the children and teach at that level; and (3) proceed to provide instruction on the next level for any element when the learning activities at the previous level have achieved the goals desired.

The conceptual learnings would require aural perception which, in turn, is developed through listening, kinesthetic rhythmic responses, singing, and playing of instruments. Within a carefully planned musical environment, the children will be stimulated through these experiences to imitate, explore, discover, recognize, memorize, recall, and evaluate.

The concepts should be developed through a varied instructional program consisting of class vocal music, class instrumental music, small ensemble playing, large group performance (chorus, band, orchestra), individual - small - large group music listening, group piano and/or keyboard experience, individualized instruction with taped program materials, "live" small ensemble demonstration programs by professional musicians, and individual small-large group supervised practice.

Where possible, appropriate music should be correlated with other areas of school curriculum. The music specialists would then serve as resource consultants to the classroom teachers in the development of pertinent units of study.

Special comment should be made with regard to "group piano and/or keyboard experience" mentioned above. The keyboard instrument is fundamental to all aspects of music. This instrument is particularly suited to teach major portions of all eight of the concepts listed. The skills acquired will also have value to children who go on to other instruments

or vocal music. The importance and versatility of the equipment needed to provide this experience are ample justification for the recommendations for suitable space.

Many music activities would be appropriate for after school hours. They include: class piano instruction; folk instrument ensembles (guitar, ukelele, accordion, etc.); acquaintance through music films and listening to records; music and dance; small ensembles for improvisation both vocally and instrumentally; "live" demonstration programs by popular and classical musicians.

These activities would encompass all age groups in the community. We would recommend the development of a program for pre-school age children (beginning at age 3) utilizing the multiple facilities of this school. Parent and child could participate together in many of these activities.

The potential sources of personnel for after school activities are varied. Some teachers would need to be hired, but the bulk of the out-of-school programs could be staffed by interested persons in the community contributing their talents and resources to the development of an effective community school. Many teenagers interested in folk music and ensembles have little if any place to rehearse without objections from neighbors, etc. This school could provide these students with rehearsal space and dance programs for our teenagers.

Staff Requirements

The Committee recommends four music specialists, at least one of whom is qualified to teach class piano. Two instrumental instructors will be required; one a stringed instrument specialist, and the other a specialist in brass, woodwind and percussion instruments. It may be that the instrumental personnel would be utilized on a shared basis with another school.

Science

Children are scientists by disposition: they ask questions and use their senses, as well as their reasoning powers, to explore their physical environment; they derive great satisfaction from finding out "what makes things tick;" they like solving problems; they are challenged by new materials and new ways of using familiar materials. The intent of the science program is to enrich every child's understanding of his environment, rather than create science prodigies. The Committee believes in a program in which the child's own rich world of exploration and discovery becomes more disciplined, more manageable, and more satisfying, through the manipulation of appropriate materials.

At this time, the program which appears to approach this philosophy most closely is that developed by the Elementary Science Study. Rather than beginning with a discussion and study of the basic concepts of science, E.S.S. makes materials available from the start which are designed to enable the child to investigate physically the nature of the world around him. This process brings home, even to very young students, the essence of science-open inquiry combined with experimentation. Experiences in the Cardozza area of Washington, D.C. provide evidence of the success of this process.[67]

The E.S.S. approach and philosophy are ideally suited to the non-graded structure recommended for the North End-Brightwood School. E.S.S. units have a wide range of interest. A three-year program can be planned in the three major areas of science (Physical, Biological, and Earth sciences) without repeating any of the units. This program is outlined on the following page.

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[67] The Cardozza Model School District - A Peach Tree Grows on "T" Street, Mary Lela Sherburne, Quarterly report of Educational Development Center, Inc., 1967.

BRIGHTWOOD PROJECT

Science Curriculum Proposal

This represents a three year program, each year providing an in-depth study in one of the following areas of science:

I.	PHYSICAL SCIENCES	Related E.S.S. units now available
	A. Electricity and Magnetism	BATTERIES AND BULBS 1. Circuits I - Simple 2. Electricity and Magnetism 3. Circuits II
	B. Machines	STRUCTURES
	C. Physical and Chemical Changes	ICE CUBES MYSTERY POWDERS SINK AND FLOAT
	D. Heat, Light and Sound	OPTICS WHISTLES AND STRINGS
II.	BIOLOGICAL SCIENCES	
	A. Microscopic Life	SMALL THINGS
	1. Cell Structure Animals	POND LIFE EUGLENA
	2. Plants	MICROGARDENING
	B. Animals	MEALWORMS (insects) CRAYFISH (crustacean) GERBILS (mammal)
	C. Plants	BUDDING TWIGS
III.	EARTH SCIENCE	
	A. Astronomy and Space	WHERE IS THE MOON? DAY TIME ASTRONOMY (being developed)
	B. Geology	OUTDOOR MAPPING
	C. Meteorology - weather	SAND

All the units listed, except three, have been tried and evaluated by Springfield teachers. The success in meeting the objectives implied in the previously described philosophy is evident in the classrooms where these units were taught.

Although it is not intended that E.S.S. units be used exclusively, their methods and philosophy are recommended as the basis for the science program of the North End-Brightwood School.

Planetarium

The numerous science concepts pertaining to astronomy and space have always been among the most difficult to teach. The vastness, intangibility and remoteness of space are factors which have contributed to this difficulty. Astronomy cannot be approached in the concrete way that geology, electricity and animals can. Observation is an important part of any science activity, yet the clear night skies necessary for observation are rarities in the city, and of course, only occur after school hours.

Springfield has been more fortunate than many communities, for it has been possible to visit the planetarium located at the local Museum of Natural History. Although this is a very worthwhile resource, there are limitations to its effectiveness in teaching astronomy to children. A museum planetarium "show" is fascinating to children, but must be categorized as an experience. It is selective in content, which would be an educational advantage if the classroom teacher were involved in the planning. However the classroom teacher does not decide the program to be viewed by her class. It is understandable why this is the situation when several classes often from different schools or towns see the same planetarium showing together. For children in the lower grades, it has been found that much of the material offered during these visits

is beyond their understanding because of the vocabulary and manner of presentation. Museum planetarium visits are usually "one shot" affairs with children visiting the planetarium perhaps two or three times during their entire public school years. The cost of transportation, the inefficient use of instructional time due to time required for transportation, and the difficulty in scheduling repeated visits are additional disadvantages.

A planetarium should be considered an audio-visual aid. Classes should be able to conveniently use the planetarium many times throughout the year so that long range observations by the children can be reinforced. A single concept at a time can be taught well during a thirty minute class session and reviewed or retaught when necessary. Phenomena can be reproduced for meaningful understandings.

The obvious solution of this problem in education is to provide planetarium facilities near or within a school which could be visited more frequently and operated by the teacher to demonstrate and teach the concepts appropriate to his class at that time. Until recently, the cost and complexity of a planetarium has made this possibility unrealistic. Nearly four years ago a planetarium called Nova III was developed whose cost and simplicity of operation made its inclusion within a school practical.

The Nova III planetarium is a functional instrument designed to be used by students and teachers. It is completely automatic and can be programmed. The purchase of the equipment includes a teacher training workshop and guidance in developing a curriculum that meets the needs of children using it. It projects the apparent daily and annual motions and positions of the stars, Milky Way, sun, moon and five "naked eye" planets, the Celestial Coordinates (Equator, Ecliptic and Meridian) as

seen from any point on earth in the past, present or future; Precession Circle or Cycle; and makes provision for celestial and meteorological phenomena.

Dr. Ross Overcash, Chairman of the Department of Earth Sciences, has stated that utilizing of the Planetarium in the Boston Science Museum in conjunction with a carefully planned curriculum is not nearly so effective as when the curriculum is taught by his staff through the Nova III. He has found it to be virtually maintenance free through three years of constant use.

The federal government has funded several projects around the country whereby planetariums serve as a necessary supplement to the classroom instruction of astronomy. One of these is located in Natick, Massachusetts and involves surrounding school systems. Another is in Sharon, Massachusetts where they have a project underway whereby social studies teachers are developing a geography unit utilizing the planetarium facilities.

Dr. Douglas Seager, now developing an astronomy unit for the Educational Development Center, used the Nova III planetarium for two years with elementary school children before joining the E.D.C. staff. His evaluation is as follows:

> Although the original excitement of seeing the new "machine" produced some interest in teachers, the real strength of the planetarium in the elementary schools was its utilization as a means of getting kids to go out and look for things in the sky. Things which eventually lead to further questions and problems for extensive study back in the classroom--I strongly believe that a planetarium can be a tremendous asset to a school science program--if it is not used to "give" answers and inhibit further questions, but if instead, it is used to supplement natural observations and pose further questions--a difficult assignment, but one well worth the cost of such an instrument.[68]

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[68] Excerpt from correspondence with the Springfield Elementary Science Coordinator, May 1968.

Planning for a planetarium before the construction of a new school is financially the most economical avenue. The dome, projector and seating capacity for up to 35 students can be accommodated in an area 15' x 15' x 15'.

The Planning Committee recommends that a planetarium be installed in the North End-Brightwood School. The educational advantages to the teaching of astronomy to children has been stated. Other advantages accrue through the study of mythology in the language arts area. The community can make use of the planetarium for adult education courses and for such groups as the Civil Air Patrol. It can also play a significant role in student teacher training programs in cooperation with local colleges.

Building specifications will be found in Chapter XVII.

CHAPTER XIV

TECHNOLOGY

Utilization of the vast resources of modern technology has come relatively slowly to the field of public education. It has only been during the past few years that serious effort has been made to adapt and harness this potential. Impetus for its use has come from many sources. Some of the more important ones appear to be:the increase in population; the shortage of teachers and buildings; the rapid accumulation of knowledge; urbanization; the need for acquiring new marketable skills faster; the increase in money available for education, and the greater emphasis on individualization. Education has attempted to meet the ever increasing needs and demands of the society it serves. It has become more and more apparent that more effective and efficient ways are mandatory for providing appropriate educational programs for increasing numbers of individuals.

The purpose of this report will be to indicate various available technological resources, briefly describe their relationship to the North End-Brightwood School, and to make any recommendations which appear warranted.

The Computor

R. Louis Bright points out that, ".....we are rapidly becoming a computor-assisted society. Few areas of our lives are not affected by

these amazing machines which appeared less than twenty years ago. Already they schedule vast steel mills, train leaders of business, check income tax returns, and guide rockets to Venus. College students are even using them for the most personal matters - to find dates for themselves."[69] He goes on to point out that education must not only acknowledge the importance of the computor and the universality of its use, but must recognize its usefulness and adaptability to educational problems. The application of the computor to the teaching-learning process is commonly referred to as "Computor Assisted Instruction" (CAI). In a typical learning situation at the elementary level involving CAI, the student sits at a console (terminal) which is linked electronically to a computor. The computor may, or may not be, located in the same room, building, or city as the student. A predetermined program is stored in the computor which is designed to respond appropriately to input by the student located at the terminal. The terminal may consist of one, or a combination of the following: electronic typewriter, small T.V. screen and/or audio system.

The programs can follow either a "branching" or "linear" pattern. It is beyond the scope of this report to explore the relative advantages and disadvantages of these two patterns.

Committee members visited several experimental installations of CAI. One was used for drill in arithmetic addition facts. In this case, the student typed his name, thereby activating the computor. The computor scanned its memory banks for that particular child's program which had been previously stored. The computor followed by energizing

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[69] R. Louis Bright, "The Time is Now", American Education, Volume 3, Number 10, November 1967, p. 12.

the typewriter to type the addition example appropriate for that child. The child then typed the answer. If the answer was right, the machine typed "correct" and typed a new example. If the answer was wrong, the computor signaled the typewriter to type "Incorrect". Try again". and retyped the example. If the child took too long to answer, he would see "too long" typed on the paper. Item analysis and other statistical information on each child was available from the computor. Although this was a relatively unsophisticated use of the computor, it is illustrative of the mechanics involved.

Although over twenty-five million dollars in federal funds had been spent on over 200 computor-related research projects through November of 1967,[70] it is clear to the Planning Committee that CAI is still in its infancy. However, a survey of the literature and research on CAI indicates almost universal agreement that there is tremendous potential in this approach. The disadvantages appear to derive from two sources: the difficulty and expense in developing appropriate programs, and the cost of installing and maintaining the equipment. The latter cost is related primarily to the cost of the necessary computor.

Another potential area for computor utilization is found in the great capacity for data storage and recall. Industry and government have, for many years, used this capability with great savings in time and personnel. The Committee sees great implication in this characteristic for its recommended programs. The Committee believes that comprehensive information should be gathered on a continuing basis for all persons served by the school whether they be children or adults. Easy

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[70]Federal Funds - Computors in Education", American Education, Volume 3, Number 10, November 1967, pp. 24-25.

availability of this information to authorized personnel would promote greater efficiency in providing services. The particular need for this kind of data storage is referred to in Chapter XV.

The Committee recommends the initial installation of at least one terminal in the North End-Brightwood School for experimental purposes and for data storage. This recommendation is based on the understanding that a new large computor is soon to be installed at Springfield Technical Institute on the consistency of positive research results on CAI, and on the belief that opportunity to develop experimental CAI programs will provide an exciting potential for participating in one of the most promising of educational frontiers.

Audio-Visual Technology

For some time, educators have utilized audio-visual media and materials as important aids in teaching and learning. Slides, film strips, sixteen millimeter sound films, film loops, etc. have proven their educational effectiveness. It is expected that this type of media will also be used in the North End-Brightwood School. Recently more and more attention has been focused on Educational Television(ETV). The Committee defines ETV as that used in the classroom, regardless of program source whether commercial such as Channels 2 and 24, or private.

The greatest value in ETV will be realized when the program material is readily available in large quantity and variety, easily transmitted to the classroom at the time needed, and directly related to the objectives of the particular instructional unit being implemented. There are also good reasons to believe that its full potential will not be realized unless the transmission is in color. At this point in time, the "state of the art" is not such that the above criteria are optimally met.

Ideally, real individualization of ETV would require that each program be developed for a particular classroom to be shown at a particular time. The impracticality of such an approach is obvious. Fortunately, a very comprehensive ETV program development and transmission facility is being developed at Westfield State College. This represents a tremendous potential for ETV program development which can be individualized to a greater extent than is now possible with existing ETV stations. For instance, it will be possible for local school systems and even teachers to develop programs for specific systems and/or classrooms. The ready availability of these programs to all praticipating systems represents additional benefits.

Recommendations

Although the Committee does not recommend elaborate ETV facilities for the North End-Brightwood School, it does suggest that certain capabilities be planned for at this point. The Committee believes that:

1. It should be possible to receive & transmit television programs in every major room in this school (classrooms, library, music rooms, etc.).
2. It should be possible to originate a program in a classroom to be shown simultaneously or otherwise within that classroom via TV.

To accomplish this, the Committee recommends that the building be constructed and wired to make the realization of these capabilities possible. It is also recommended that this school, as a minimum requirement, be provided with a suitable Video tape recorder in order that the potential of ETV in this school can be more fully realized.

Audio

The curriculum areas of this report indicate a variety of needs for programs utilizing audio materials and equipment. The foreign language, music, and reading areas in particular see the use of tapes as an integral part of teaching strategy and technique. Some of the anticipated uses are: drill and instruction in Spanish and English, note reading, pitch, rhythm, composers, etc. in music and literature. An experimental program in individually prescribed instruction (IPI) which shows a great educational promise utilizes tapes to a great extent. The Committee anticipates that tapes will play an increasingly larger role in the efforts to individualize instruction.

Unlike reading and literature, foreign language and music require that there be immediate feedback of the learners' response for the most effective and efficient learning. This has implications for the capabilities of the equipment used rather than the physical facilities. In this case, the Committee recommends two twenty-five to thirty position laboratories which have the capabilities of immediate feedback and individual monitoring of each station from the two respective consoles. One of these laboratories would be expected to serve the purposes required of the electronic pianos recommended, as well as the foreign language program.

In addition to the laboratories recommended above, the Committee suggests that each large room, i.e., 100 children, include five "dry" carrels to be utilized for listening experiences in music, foreign language, and literature. A minimum of fifteen carrels should be planned for within the library facilities which can be used for both in-school and out-of-school listening activities. The community will be

able to use these carrels for listening and language. Junior and senior high school students could be assigned particular listening activities as part of their normal homework requirements as well.

The Committee also recommends that experimental tapes be developed as part of a total program of individualization which would provide children with experiences and instruction in other curricular areas.

It is clear that the number of different tapes needed for the program described above will present storage difficulties unless adequate provisions are made. Getting the right tape at the right time in the right carrel could also present problems which could defeat the basic purpose. Fortunately, these problems can be resolved partly through design and partly through electronics. The Committee recommends that tape decks be provided and centrally located in sufficient numbers that twenty-four different tape programs can be transmitted simultaneously if necessary. Ample storage space for additional tapes should be provided at this location. In addition, a dial or digital access system should be installed,so that any tape can be selected directly from each carrel. The capability of selecting any tape for program transmission to any room through the intercom system should also be provided. Finally, the two laboratories recommended should be an integral part of this total system.

CHAPTER XV

COMMUNITY SERVICES

The need for augmented community services in the North End-Brightwood area has been glaringly evident in every survey made during the past several years. This fact was further substantiated by the Planning Committee through advisory committee meetings, interviews with personnel from more than twenty public and private agencies, and in discussions with residents, Vista Workers, and Block Club Leaders. George Schermer Associates[71] lists the following as specific problems and services needed in the Brightwood area alone:

Problems

---Under-employment
---Unemployment
---Unemployability
---Illiteracy
---Educational deficiency
---Language difficulties
---School dropouts
---Unemployed and idle youth
---Juvenile delinquency
---Unruly and disorderly behavior among children
---Aggressive behavior between groups of children
---Vandalism
---Substandard housing conditions
---Poor housekeeping
---Poor home budget management
---Unstable and incohesive families
---Marital problems

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[71]Report by George Schermer Associates for Marcou, O'Leary and Associates, A Program for Community Services and Community Relations for Brightwood, 1967, pp. 31-33.

---Illegitimacy
---Neglect of children
---Alcoholism
---Handicaps due to criminal record
---Criminal charges requiring legal defense
---Readjustment problems of those returning from penal and other institutions
---Emotional and behavioral problems
---Health problems
---Isolation and alienation of Brightwood as a whole from the Springfield community
---Isolation and alienation among the several population groups within Brightwood

Needs for the Elderly

---Health and nursing needs
---Fellowship and recreation
---Community feeding service

Services Required

---Vocational counseling
---Training programs
---Outreach for undermotivated
---Individual and specialized placement
---Child care and homemaker services for working mothers
---Educational counseling and tutoring
---Special classes for high school dropouts
---Adult classes in basic English
---Adult evening classes of all types
---Neighborhood Youth Corps
---Organized recreation and sports
---Special educational and training programs for youth alienated from school
---Individual and group counseling
---Youth guidance
---Family and marriage counseling
---Homemaking demonstrations
---Classes in homemaking and family budgeting
---Adult discussion groups in child guidance
---Child guidance service
---Legal assistance and defense
---Protective services for children
---Individual and group therapy
---Public health services of all kinds
---Health education
---Mental health clinic
---Public nursing service
---Individual and group therapy
---Assistance and guidance in community organization and community action
---Golden Age Center
---Public Health Nursing Center for elderly

Some of the needs as seen by members of the advisory group of residents are listed below:

Health services	Band rooms for practice
Welfare	Rooms for music appreciation
Room for community meetings	Emergency service
Youth Opportunity Corps	Community newspaper - Spanish
Child and family Service	Cooking classes
Mental health	Day care
Planned parenthood	Recreation room for 11-13 year olds
Drop-in center	Lounge with vending machines and TV
Room for homework with likeable person to help	Family trips
Enrichment trips	Place for hobbies
Athletic teams	Regular film showing

If one considers welfare expenditures as an index of a community's problems, then the following table of estimated welfare dispersal from January 1, 1968 to April 1, 1968 in the North End-Brightwood area provides significant evidence as to the magnitude of the problems faced by many of the residents of this area.

North End-Brightwood Area - Estimated Welfare Expenditures

	Spent	Cases	People
Medical Assistance	$ 229,613	1,501	3,937
Old Age Assistance	41,415	546	546
A. D. C.	109,121	601	1,026
General Relief	49,747	341	632
Disability Assistance	16,135	184	184
Total	$ 446,031	3,173	6,325

That the needs are not being adequately met is freely admitted and is the source of much concern on the part of residents and responsible agency personnel, both public and private. It became clear at the outset that if the concept of the community school described earlier was to be consistently followed, then the Planning Committee could not with clear conscience ignore any major aspect of that community's problems. An advisory committee of agency representatives was formed to help the Planning Committee determine:

---the needs of the area as perceived by the various public and private agencies according to each agency's sphere of effort

---the extent to which the needs are being met

---which agencies attempted to meet which needs

---and finally to explore the possibility of some sort of coordinated agency effort within the physical context of the school.

An Advisory Committee of Neighborhood Residents was also formed to determine cooperatively the needs in the area as seen by the residents. This committee also served as means of informing the community of planning progress, and as a "sounding board" for the ideas being discussed by the Planning Committee. Residents were taken to Conte School in New Haven and the East Farms School in Farmington, Connecticut to observe, question, and discuss new educational practices. The interaction of ideas among the various committees has proven profitable.

The Planning Committee believed that the combined, cooperative efforts of the Committee of Neighborhood Residents, the Committee of Agency Representatives and its own committee could result in the development of a viable plan. Success in this effort was limited. Because of the low attendance at meetings, committee members initiated "coffee klatches" in neighborhood homes, and conducted over forty personal interviews with agency representatives. The informal discussions with the residents in their homes were profitable, but time consuming. The initial cautious reception of the committee members was invariably followed by enthusiastic cooperation. The agencies contacted were friendly and helpful. Their concern and lack of accomplishment over the problems in the North End

Brightwood area were very real and very frustrating to them.

Some of the reasons for the frustrations of the residents and agencies became evident during the course of this planning effort. A lack of knowledge of the services available, unavailability of transportation, apathy, complexity of "day-to-day" living with multiple problems, failure to recognize potentially serious problems, and inappropriate or non-existent facilities were common to many residents. Language represented a barrier in some cases also. In general, agencies were unable to accomplish their objectives because of:

1. A lack of money
2. The unavailability of trained personnel
3. An inadequate knowledge of the scope of the needs
4. Inadequate intra-agency coordination
5. Insufficient knowledge of the scope of other agency effort
6. The difficulty in getting people to the agency
7. Lack of community commitment in terms of personnel and money
8. Overworked and overloaded staff
9. Breakdowns in lines of communication
10. The difficulty created by the absence of comprehensive community social planning.

Distillation of the many conversations points up the fact that the solution to the problem of efficiently bringing people and services together may be with the people who wish to use the services and the agencies that are competent to provide them. A look at the reasons for resident frustration presented earlier would indicate that a massive program of edu-

cation might provide part of the answer. Agencies sometimes indicated that their services were available to any resident who sought them, provided the potential recipient contacted the agency. The advice usually followed that it remained for someone to educate the people with regard to what was available and how to obtain it. Unfortunately, solely relying on education does not appear to be enough. Markey clearly defines the problem as it relates to residents of public housing. He believes that "the term 'educate the tenants' is an example of over-simplification to which the public is too prone in seeking answers to complicated social problems. . . .Too much dependency is placed in treating surface symptoms in the hope that something magical happens in the name of education."[72]

Although the Committee agrees with Markey's position, it does not deny the need for and value of education. There is definite agreement that a major effort should be made in this area. It also believes that the agency which provides the service has some responsibility to educate its potential clients, and that this will invariably require some rather extensive "outreach" activity by that agency.

A second area of increased emphasis is that of more and better-trained personnel. As in education, the solution is not simple. However, it appears that the effort must be focused on higher salaries, improved "image," more intensive use of in-service training, and the utilization and training of aides and para-professionals. Greater community commitment (particularly financial) is needed to reach these goals. In addition, agencies will need to re-evaluate professional responsibilities to determine what tasks can be

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[72]Sidney P. Markey, "A Partnership in Urban Renewal," in Planning Social Services for Urban Needs, National Council on Social Welfare, Columbia University Press, New York, 1957, pp. 32-48.

suitably performed by aides and para-professionals to free professionals for professional duties.

It is important that in a situation such as that found in the Springfield area, where demands for service are far in excess of the agency resources available, that the existing resources be used as efficiently as possible. Improved intra- and inter-agency coordination is a way of achieving this. There appears to be general agreement that this improvement is necessary and possible in Springfield.

A conference held by the National Council on Social Welfare explored in detail the problems intrinsic to developing coordination among many independent agencies. Simmons states the challenge when he says:

> How can we perfect and further develop our machinery for bringing completely autonomous agencies into cooperative working relationships for the manifold benefits of united action without surrender of their basic sovereignty?[73]

Sheer numbers of agencies alone make the challenge a massive one. For example, the Community Council reports that the Salvation Army has indicated in a survey of only Riverview that thirty-three agencies or organizations were serving the residents.[74] Simmons reports that a Community Research Associates, Inc. study in St. Paul, Minnesota found that some hard core families were known to thirty different health and welfare agencies.[75] Both the above citations were used by their authors as evidence that coordination was imperative.

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[73]Harold E. Simmons, "The Challenge to Team Work in Social Welfare," in Community Organization, National Council on Social Welfare, Columbia University Press, New York, 1959, p. 36.

[74]Community Council, Study Report on Request for an Additional Worker For the Salvation Army, The Community Council of Greater Springfield, Inc., 1966, pp. 4-5.

[75]Simmons, Op cit., p. 19.

Summary

The efforts toward more effectively meeting the needs of the North End-Brightwood community should be directed toward education, realignment and augmentation of personnel, utilization of para-professionals, and coordination of existing services.

It would appear that the North End-Brightwood School may be able, through its philosophy, location, and organization, to provide the impetus and means for a comprehensive, coordinated approach to community needs. The School Department as a separate agency with its basic concern for education cannot and should not attempt to provide for the total needs of the community. Those needs which are unrelated to education must be provided through the cooperation of all community agencies.

The school can, however, suggest ways in which needs and resources can be more efficiently brought into juxtaposition; can provide some facilities for this to occur; and can serve as a catalyst in the process. The sections which follow will be an attempt to describe these roles. No attempt will be made to suggest programs in detail since program needs could, and undoubtedly will, change between the time of this planning effort and the opening of the school. A basic objective of the Planning Committee, however, is to make recommendations for organization and physical facilities which will be sufficiently versatile that the ultimate program can and will reflect the community's needs as determined cooperatively within the community.

Health

The Planning Committee has found it impossible to determine the full extent of the health needs of the North End-Brightwood area. The

limited studies which have been done indicate that the needs are great for some segments of the population. The most comprehensive and recent of these is the Springfield Area Community Health Study[76] completed in December, 1965. The findings and recommendations in this study are quite definitive. Some of its recommendations have been implemented to some degree, some not at all. The findings indicated that a substantial portion of the study area population was receiving minimum health services. The Study Committee believed the causes basically derived from:

1. Limited financial resources and educational attainment, sense of values and motivation play a large role in preventing many people from using the health sources available.

2. Fragmentation of existing resources and lack of a defined structure in the community to co-ordinate these agencies limits the most efficient use of available services.[77]

The Committee interviewed many professional people in the health field. They included doctors, dentists, and nurses in a variety of special health areas. Some of the health problems as seen by those interviewed and the difficulties in meeting them are listed:

1. Hospital facilities are often improperly used. Residents sometimes use the Out-Patient facility when there is no need, or wait too long for medical attention.
2. The shortage of professional personnel is critical.
3. There is concern for the higher infant mortality rate where pre- and post-natal care has been inadequate or non-existent.
4. Language barriers occasionally hamper communication.

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[76]Herbert P. Almgren, Chairman, Springfield Area Community Health Study - Recommendations, Community Council of Greater Springfield, Springfield, Massachusetts, December, 1965.

[77]Ibid., p. 32.

5. There is often little or no follow-up on patients.
6. The patients frequently do not assume responsibility for following through on prescribed treatment.
7. Occasional displays of poor attitudes and behavior by persons seeking medical attention irritate and alienate professional personnel.
8. Low standards of health and knowledge contribute to increased medical problems.
9. Since some residents receive care from different people, in different places, at different times, there is sometimes difficulty in obtaining complete medical histories.
10. Locating potential and existing health problems has proved difficult.

Discussions with residents who felt that there were problems inhibiting the achievement of higher levels of health revealed that some of the probable difficulties may be caused by:

1. Not having a family doctor.
2. The inability to get medical attention except at the hospitals.
3. Difficulties in securing transportation.
4. Unavailability of drug stores.
5. Language barriers.
6. Occasional examples of poor attitudes and rudeness on the part of professional people.
7. The frustration of not knowing what to do, whom to call, or where to go when a problem develops.

There are several existing resources available to solve the problems listed above. Among them are the Visiting Nurses Association, the school nurses and doctors, the Springfield, Wesson Maternity, and Mercy hospitals, the state and local Public Health Departments, Medicare and Medicaid. Various other public and private agencies are resources which could exert positive influence although their basic areas of competence may not be that of health. The proposed Mental Health Center will also be a major resource on its completion.

The challenge appears to be to provide a plan designed to alleviate the existing health problems to a greater degree than at present. It would appear that the needs fall into four general areas: education, increased medical personnel-resident contact, more efficient use of existing resources, and increased personnel.

The proposals which follow represent the help and thinking of the many professional and lay people who helped in the planning of this school. In most cases, the suggestions are tentative and skeletal. Much more planning and commitment will be necessary if ultimate solutions are to be realized. The Committee has applied the team rationale to the health area. The persons who make up the health team will consist of all personnel whose basic concern is the health of the community and whose efforts are, at least to some degree, within the context of the Community School. Team personnel and their functions will be described in the sections which follow.

School-Community Health Center

The Health Center is seen as a focal point for community health problems, and in many cases would represent the initial medical contact for

persons of all ages with health problems. Its functions would include:

1. Data storage on persons contacted.
2. Screening and minimal diagnosis.
3. Referral.
4. Liaison between institutions, professionals, and the community.
5. Education.
6. Provision of initial and continuing medical contact with the community.
7. Limited medical and nursing service.

The first four functions are directly related to improved coordination of health services.

The personnel to carry out these functions can and should come from many sources. The Springfield Hospital is considering an Out-Patient extension service to be initially located in Riverview. If this is approved by the Springfield Hospital Board of Directors, a medical team attached to the hospital will provide initial screening and some diagnosis and service at the point of need. Faculty from the University of Massachusetts will be a part of this team and will utilize the program as part of the field work for student nurses. The details of operation and numbers and kinds of personnel will be determined pending Board Approval. The Planning Committee anticipates that personnel from nearby hospitals will also become members of this team, functioning within their areas of specialty. Patients will be referred to appropriate sources for detailed diagnosis and care.

It is anticipated that, if approved, this program will begin operating on a pilot basis prior to the opening of the North End-Brightwood School.

If successful, it will be logical to locate in the school from the standpoint of service to the larger community from a more central location. It is conceivable that this plan could provide the service nucleus and supervision potential for the total Community School health effort.

Nursing

The Visiting Nurse Association and Public Health (School) nurses are currently functioning in the North End-Brightwood area. The V.N.A. describes its agency's functions as:

1. Furnish the services of nurses and physical therapists to sick persons.
2. Promote health - individual, family and community.
3. Prevent disease by teaching the principals of health, hygiene, and sanitation.
4. Assist in interpreting the public health program to the community.[78]

The responsibilities of the Public Health Nurse who is school based are listed briefly:

1. Child health conferences
2. Liaison between the school and home
3. Serves as a consultant to parents, principals, and teachers
4. Assists the school physician and records his findings
5. Interprets physician's findings to school personnel, parents and pupils, and helps the family to assume the responsibility for the needed care
6. Follows up on child health problems

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[78]These functions appear in response from the V.N.A. to a questionnaire sent by the Planning Committee to the V.N.A. and other agencies.

7. Assists in the immunization programs in the school
8. Reports violations of health laws and regulations
9. Maintains a file of health record cards
10. Renders first aid
11. Assists with school health education
12. Maintains required Health Department reports[79]

In addition to their school assignments, Public Health Nurses have responsibilities in communicable disease control, infant and pre-school health supervision, day-care services, and premature assistance and related work.

Although the responsibilities of the Public Health Nurse and the Visiting Nurse are essentially different, the Committee feels that they are sufficiently related that by working closely together nursing services in this area would be improved. These personnel would be a basic part of the health center team. The result could be a fully generalized public health nursing program which could include the following services in addition to those normally considered part of the school:

1. A health education program for the family, including home nursing, infant care, and efficient housekeeping techniques.
2. A comprehensive maternity program with particular attention being given to the high risk mother. This type of program would involve hospital and medical personnel. Also, it should include special attention for the school-age unwed mother.

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[79] Health Services in the Schools of Springfield, Springfield School Department, Springfield, January 1966, pp. 14-16.

3. Day care service should also be made available.

4. Care of the sick in their homes would also be included.

The possibilities of such a program have been discussed with the Health Department and Visiting Nurse Association. There appears to be no objection in principle to this program. However, there are many details which must be considered. Those which appear to be most significant are concerned with supervision, administration, legality of payment for some services, number and kinds of personnel needed, in-service training, and financial requirements. The Committee recommends continued study toward combining the efforts of the V.N.A. and Public Health Nurses. Freeing the nurse for more public health activities through the use of an aide qualified to administer first aid and maintain health records could be a significant beginning.

Dental Health

Considerable effort has been made to define a community dental health program which would appear to meet effectively and efficiently the needs of this community. There seems to be general agreement among local dentists that the dental clinics operating in Springfield and other places are not satisfactory for many reasons. Some of the reasons for this disenchantment are:

1. Inadequate compensation.
2. Inefficiency due to unfamiliar equipment and personnel.
3. Providing emergency treatment only, sometimes leads parents to conclude that all work necessary has been done.
4. Some patients' pride prevents full use of the clinic.

5. Some patients tend to rely too heavily on clinics and get the "clinic habit."

6. Difficulty in finding dentists to staff a clinic.

It is contended that with medicare and medicaid, it is no longer necessary to maintain clinics, since any person who needs dental care can get it independently in private offices. It has been further suggested that the answer to improved dental care lies in educating children and parents rather than in maintaining clinics.

The Committee feels that the dental program in the Health Center should have education as a major emphasis. There should also be emphasis on prophylaxis and definitive screening with proper facilities. The need for actual dental service within the Health Center is still being investigated. Interested local and state dentists and the Planning Committee are exploring the possibilities of developing a pilot dental health program which will more fully meet the needs of this area. The effort and interest of the dental profession are encouraging.

Summary

The Planning Committee visualizes the Health Center at the North End-Brightwood School as a focal point for the health resources and needs of this community. Whatever the program, it should, as a minimum requirement, instill confidence and reassurance in the residents, and provide the means for gaining greater efficiency and coordination of existing health resources.

Implications for Facilities

Although the specific health program ultimately to be a part of this school cannot be described at this time, the Committee can predict some

likely features. For instance, there will be general public and school child oriented programs. The kinds of personnel needed for each have some commonality. The location of the Center must be convenient to the classrooms, while at the same time be easily accessible to the public. Separating the Center into two facilities to eliminate the conflict of location may make it difficult to utilize a common staff. The design features of such a facility will need to be carefully studied.

The Committee's specific recommendations for Health Center space will be found under "Educational Specifications."

Library

The purposes and functions of school and public libraries differ. The Director of the Springfield City Library describes the public library as follows:[80]

> The public library of any community is supported from public funds to meet the educational, informational, and recreational needs (in terms of the various types of materials it acquires, organizes, distributes, and interprets) of all residents of the area it is intended to serve. It is not a service primarily for the very young or the senior citizen. To the extent it favors one age group it is likely to neglect another, thus distorting its total role in the community. It is not a service primarily for the well informed or poorly educated because it aims at providing for each resident within his ability to learn and benefit. It is the instrument for the continuing education of the adults: for the man who would start his own business or who seeks materials to help learn a trade; the housewife who needs housekeeping hints; the home handyman who needs to know how to do it; the senior citizen who needs to enrich his golden years. As for our children, it is important to develop in them the public library "habit," to the extent that the home and general environment will permit. It is doubtful if the pub-

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[80]Francis P. Keough, Public Library Service for the North End-Brightwood - Atwater Park Area of Springfield, May 1968, p. 5.

> lic library can effectively play its role in the community if the children are not oriented to its services. Hence, teaching the children to use the services of the public library at an early age is essential, if these services are to be meaningful to them as adults.

He sees the school library as being essential in supporting the demands of the curriculum while the ". . .public library builds its children's book collection without reference to curriculum, but with the individual child's personal needs in mind."[81] He goes on to state that although the library serves to help the child with school oriented projects, it is ". . .especially interested in instilling in him a love for reading for the joy of reading."[82]

Kennon and Doyle see the school library as making four essential contributions:[83]

1. It is a center for the learning materials required to support the instructional program and meet the needs of students.

2. It offers a planned, continuous program of instruction in library and study skills, equipping pupils for independent use of learning resources.

3. It serves as a classroom laboratory for reference and research work, and its staff works closely with other teachers in a team approach to instruction.

4. It offers individual guidance to students in using materials - in reading, listening, and viewing - to meet their personal, social, educational, and vocational needs.

A report to the Planning Committee by the Director of Reading for the Springfield Public Schools indicates that she believes that the school library not only serves the curricular needs of children, but

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[81] Ibid., p. 6.

[82] Ibid.

[83] Kennon, Mary Frances and Leila Ann Doyle, Planning School Library Development, School Library Development Project, American Association of School Librarians, 1962, p. 10.

. . .it must also provide for personal enjoyment reading. This is especially true in a culturally deprived area where children's parents will generally not "see to it" that their children visit the public library, where there are few reading materials in the homes, and where the school has to provide most of the motivation for reading which children receive. The school librarian knows <u>all</u> the children because they come for many purposes to the school library. She can, therefore, exert strong influence in guiding them not only to study materials, but to those materials that will capture their interest and make "readers" of them.

The modern school is no longer text-book oriented: children are not confined to a single textbook or textbooks for information needed in a given subject. They will still use textbooks, but these must be supplemented by many other kinds of materials. One important reason for this is that, with the explosion of knowledge, especially in such areas as science and social studies, they must have access to such materials as magazines, newspapers, and pamphlets. Also, it is now widely recognized that children learn better from multi-media than from books alone.

The new concept of the school library as a media resource center has grown from this understanding of the need to approach learning through a variety of channels. The school "library" is now a "school media center." In the new North End school plans should be made to house, circulate, and use all types of media.

> Because knowledge is growing so rapidly and facts are so soon out of date, it is much more important that children learn "how to learn" than that they learn facts <u>per se</u>. For this reason, the instructional program in which children learn how to use the many materials housed in a media center is of vital importance to a good school program.[84]

A major difference between public and school libraries focuses on the prerequisites for location. The function of the public library requires that it:

1. be close to a business or shopping center,
2. be in a well-traveled location,
3. be on a direct bus line,
4. have adequate parking,
5. be in a separate building,
6. be on the ground floor,

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[84]Taken from correspondence with Olive S. Niles and the North End-Brightwood Planning Committee, June 6, 1968.

7. entrance visibility from the street,
8. be in a straight-level building,
9. be able to operate independently during school hours.

Mr. Keough's suggestion that the library be located on Main Street on the plot bordered by Main Street and Route 91 is consistent with most of the points mentioned.

The school library, on the other hand, can be deep within the building. The primary criterion for its location is that it be easily accessible to children during school hours.

The Planning Committee believes that economy dictates that the school and public libraries in the North End-Brightwood area should be designed and constructed so that there is some sharing of facilities. The Committee is convinced that the differences in purpose and function need not detract from each other, but rather augment. It is true, however, that there must be separation of some facilities to achieve the desired goals of each. The Committee feels that this is a design problem rather than an operational factor.

The School Department and the City Library Association representatives are currently in the process of determining and defining the specific space requirements of this school-public library facility. Some of the space components which could be common to both uses are: shipping, receiving and processing areas, staff lunch and locker facilities, office and storage space. Other criteria for determining space needs and location are:

1. Certain school areas must be able to be separated from the public areas while school is in session.

2. Children's book collections must be readily accessible to the public after school hours.

3. Spaces for carrels, media production, small group viewing and listening, conferences, independent study during and after school hours, and for teaching library skills to groups of twenty-five to thirty-five should be provided.

The overall space requirements of this facility are expected to be approximately 15,000 square feet.

Administration

It is understood by the Planning Committee that the library staff, both school and public, will be paid and administered by the City Library and that the facilities will be maintained by the School Department. The librarians working with school children during school hours should be trained as school librarians and would be expected to attend city-wide meetings of school librarians. Books and magazines will be cooperatively selected and purchased. These and other details of this cooperative venture should continue to be discussed and evaluated prior to the opening of this facility in order that its initial and continuing success can be assured.

Social Services

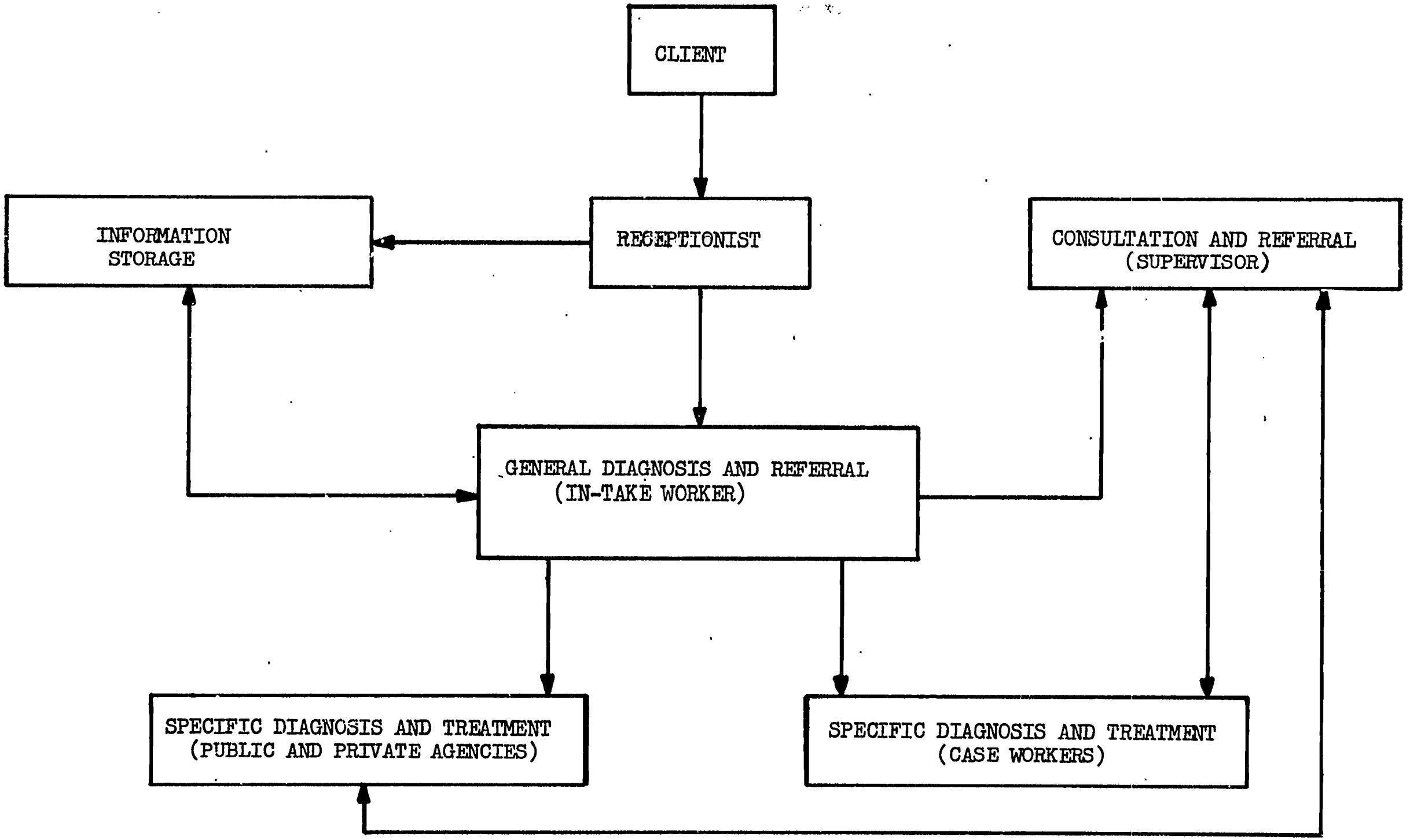
For the purposes of this report, social services will be considered to be any services required to help individuals and families solve the problems which are preventing a full realization of their potential for becoming well adjusted, contributing members of their community. These services might include counseling families, individuals with personality problems, parents, children, and the aged. It could include help in resolving financial and employment problems. Problems involving adoptions and unmarried mothers, locating foster homes, and providing homemaker services would also be within the definition of social services as defined in this report.

There are many agencies in the community which are currently attempting to meet these needs. Some, such as Child and Family Service and the

Welfare Department try to provide comprehensive services. Others, such as the Child Guidance Clinic, attempt to serve particular groups or individuals with certain specific problems. The difficulties and frustrations in attempting to alleviate these problems through a multi-agency approach has been touched on in the initial paragraphs of this chapter. It bears re-emphasizing that, in the opinion of the Committee, the greatest needs facing the agencies lie in the areas of personnel and coordination of services. Further inhibiting factors appear to be relative inaccessability of some services and insufficient client knowledge of those services which are available to him. The Planning Committee's proposals relating to social services are an attempt to alleviate these areas of difficulty, at least to some degree.

The Committee recommends that a cadre of one and one-half in-take workers, (the one-half in-take worker is included in order that there can be some coverage evenings and Saturdays), two and one-half case workers and a receptionist be located at the North End-Brightwood School. The functions of this team would involve in-take, referral, treatment and data storage for clients contacted. A flow chart diagramming this process will be found on page 171. Residents, regardless of age or problems, would be encouraged to contact the personnel at the social services center. The receptionist would be responsible for obtaining minimal information followed by referral to the in-take worker. A general diagnosis of the client's needs would be made to discover whether they could best be met through one or more existing community agencies or by one of the case workers assigned to the service center. The client would then be referred according to this decision. The problem, its initial analysis and referral decision, would then be recorded and filed by the in-take worker,

SOCIAL SERVICES FLOW CHART



In cases where the client's problems were of a nature which required a cooperative decision as to an appropriate referral, the supervisor of case work would be called in for consultation. In some instances it is possible that the treatment agencies or supervisor would request general agency consultation. It is to be hoped that ultimately information on the final disposition of the cases could be channelled back to the central data storage. This could represent a beginning toward an effective social service index, particularly if information on all clients from the area who may have followed different channels was systematically provided for through central storage.

The Committee recommends that Child and Family Service act as the supervising agency for the personnel described. This recommendation is based on the reputation of this agency among clients and other agencies. A willingness to serve in this capacity has been indicated by this agency.

The Department of Public Welfare is charged by law (Chapter 18, Section 2 of the General Laws of Massachusetts) with providing the services described above. It appears logical to the Committee that this department provide the appropriately qualified personnel described on a detached service basis. Conversations and correspondence with authoritative personnel in this department indicate that personnel can be provided on this basis.

The Committee recommends that this proposal involving the direct cooperation of the agencies (school-facilities, private agency-supervision, public agency-personnel) be initiated as a pilot program. However, further detailed study should be a prerequisite.

Employment

That there are problems of unemployment and underemployment of some magnitude in the North End-Brightwood area has been cited previously in

this report. Outreach efforts by the Division of Employment Security, the Urban League, SAC (Springfield Action Commission), and others have had and are having positive effects. Discussions with residents, agencies, and others interested and concerned with employment opportunities reveal that more needs to be done. As the Planning Committee investigated, there was some indication that having personnel located in the area to help match people and jobs could have positive results. Correspondence with the Director of Employment Security indicates that there is a willingness on the part of his department to cooperate. Although further planning is necessary, it would appear that the personnel who might operate in the community school facility should be in the categories of Placement Interviewer, Counselor, and Test Administrator. The number of persons needed in each category will be determined as the program develops.

Some space in the social services area should be planned for the anticipated participation of other agencies as the needs of the community dictate. Neighborhood Legal Services may well fall in this category. Since it is difficult to predict future community needs, this space should be designed for flexibility of use.

Recreation, Education, and Club Activities

The Planning Committee views recreation, education, and club activities as consisting of leisure time activities which appeal to the mental, social, creative, and physical needs of the community. The performing arts, cultural and educational activities, arts and crafts, hobbies, etc. are equally as important as the physical activities represented by baseball, swimming, softball, basketball, etc. and normally considered as recreation.

Many public and private agencies are currently attempting to meet community needs in the above areas with limited success. The problems appear to stem from a lack of combined comprehensive planning, coordination, money, personnel, and adequate facilities. The proposed community school can provide the means for overcoming many of these problems through its coordinating personnel, augmented facilities, and most of all through its philosophy of the school's role in the community. Some of the specifics on how this may be accomplished will be discussed in the latter sections of this chapter.

It should be noted that it is impossible for the Committee to determine what specific programs residents in various age groups will be interested in at the time this school is built. The Committee can predict, based on the experiences of other community schools, that the interests will be many and varied. The following sampling of the activities at the Conte Community School in New Haven is illustrative:

Programs for the Elderly:

Oil Painting	Knitting	Square Dancing

Educational Programs:

Playgroups	Great Books Club	Guitar Class
Dining Out Club	Drama Workshop	Community Orchestra

Group Work Programs:

Fun Clubs	Hobby Clubs	Arts and Crafts
Pre-Teen Lounge	Knitting Class	Charm Class

TENTS: (Try Employing Neighborhood Teens)

Teen Club	Teen-age Lounge

Adult Education Programs:

Adult Basic Education	Dressmaking	Elementary Americanization
Intermediate Americanization	Advanced Americanization	Cooking and Baking

Park Recreation Programs:

Ballet Workshop
Girl's Athletic Club
Men's Night
Tennis
Gymnastics
Teenage "Free Gym"
Ladies' "Early Bird" Physical Fitness
Weightlifting
Men's Physical Fitness
Ladies' Slimnastics Class

Pool Programs:

Family Swim
Junior Life Saving
Swimming Instructions -- Women
Community Swim
Canoe Safety Demonstration
Group Swim
Swimming Instructions -- Men[85]

Fortunately, most programs which are likely to be developed will be able to utilize the physical facilities that will be required for the normal educational program. Brief descriptions of space requirements for those programs which will require special facilities will be indicated in the appropriate sections.

Recreation

The recreational needs, and analysis of those agencies concerned with these needs, have been well documented in a survey by the Institute of Community Studies in 1965[86] and a follow-up assessment by the Community Council of Greater Springfield in the fall of 1966.[87] For the purposes of this report, it will suffice to say that the needs are great and that the existing facilities and personnel are inadequate in quantity, and in some cases quality, to meet these needs. Large gaps exist in recreational activities for all age groups. Those programs which do exist serve only a relatively small portion of the total population.

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[85]Tirozzi, op. cit., pp. 27-31.

[86]Ibid.

[87]An Assessment of Leisure Time and Recreation Resources in the Pioneer Valley United Fund Area, Community Council of Greater Springfield, Inc., Springfield, November 1966.

Some of the existing agencies which could be considered as resources in recreation are the Springfield School Department, the Parks and Recreation Department, the North End Community Center, the Springfield Boys' Club, YMCA and YWCA, and the Boy Scouts and Girl Scouts. Preliminary suggestions for augmented recreational programs have been received from some of these agencies. The suggestions received do not represent any significant changes in agency roles or services although each has indicated a desire to change and adapt in any way required to gain the desired objectives.

It will be the responsibility of the community school administration and Community Coordinator, in conjunction with interested agencies, to develop the necessary recreation program and corresponding leadership. The Committee is convinced that this can be done more readily at the time the services are to be implemented. In most cases facilities already planned for the regular school program will be adequate for the extended recreational services. Exceptions will be noted under Educational Specifications.

Education

For the most part, the Committee will consider only those educational activities which will take place after school hours. The range of possible educational programs for adults is as wide as the current offerings in adult evening school. The Committee recommends that every effort be made to offer as great a variety as possible. Encouraging participation will be as great a responsibility as developing the programs, however. The Committee suggests that a comprehensive program of remedial and enrichment activities be organized for children after school and during the early evening hours. There are a variety of agencies in addition to the School

Department who are interested in this kind of program. The Northern Educational Service has requested space for conducting a tutorial service. Volunteer adults from the community represent another major source of personnel. In most cases the educational programs will be able to utilize existing facilities.

The Committee anticipates that there will be some need for classroom space to be available during school hours for some adult and teen-age children who are not in the regular school educational programs. It is for this reason that two additional classrooms are recommended for this type of use. These rooms may be used for enabling those without high school diplomas to gain the academic credits necessary; aide in-service training; and acquisition of certain job skills, etc. One specific design requirement of these rooms is that they be easily accessible to the public.

Club Activities

Although there is an overlapping of functions between club activities and the areas previously described, certain programs such as those involving the Golden Agers, the Springfield Hobby Club, teen drop-in centers, etc. are distinctive in that one of their common elements is the desire to develop positive social relationships. Although the elderly plan to make use of the recreational and educational facilities of this school, they apparently do not feel a need for any special facilities. The Committee believes that meeting and activity rooms and the community library will be used consistently and well in programming for the elderly.

Considerable interest has been shown by teenagers and adults in a teenage drop-in center within the context of this community school. The value of a well-organized and competently administered center is recognized

by the Committee. The quality of leadership is of utmost importance in a venture of this nature. The North End Community Center has indicated a desire to maintain and supervise such a program. The Committee suggests that space be provided for such a program on the assumption that the necessary competency in leadership can be acquired.

Summary

The Planning Committee has felt some handicap describing community programs in any real detail due to the difficulties in first, predicting needs of this community at the time the school is built; and second, getting definite commitment with regard to future program development and agency participation. In spite of these uncertainties, the Committee is enthusiastic and optimistic that essential elements of the programs described above can and will be realized.

CHAPTER XVI

ADMINISTRATION

The administration of the North End-Brightwood School will be more complex than is currently the case in most conventional elementary schools. This is only partly due to the large numbers of children. The primary reasons for this complexity are focused on the greatly increased parameter of school responsibility and the augmented use of school facilities by the community. It is quite evident that a program which operates up to ten hours per day, six days per week during the entire year could not be supervised effectively and efficiently by the conventional number of administrative personnel.

New elements are present in the community school which will require quite different role functions of the administrative personnel. In this school, many decisions normally made by administration will be made by the team of teachers. The administrator will become an "enabler", a coordinator, a consultant and supervisor, an "interpreter of general policy". Ideally, he will be a community leader as well as an educational leader.

The organization chart on the following page, (Fig. 1) graphically represents the personnel and their line, staff, and coordinating relationships. The vertical lines represent line responsibilities. The horizontal lines represent staff functions, and the dotted lines represent coordinating roles. Although not mentioned on the chart, each

ORGANIZATION CHART

NORTH END - BRIGHTWOOD COMMUNITY SCHOOL

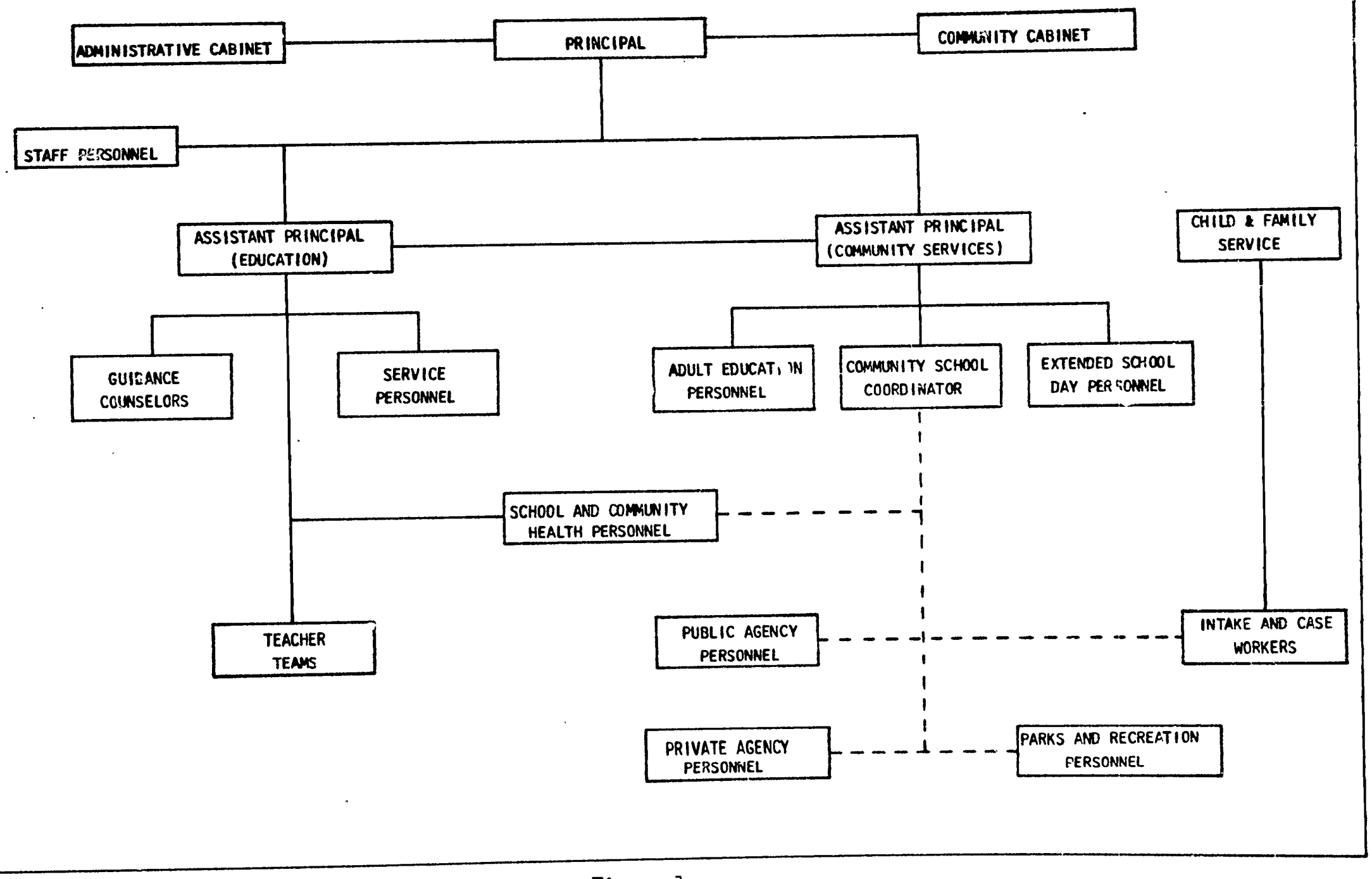


Figure 1.

teacher team would have line responsibility for that team's aide.

The following sub-sections are intended to explore the roles and characteristics of personnel and/or organizations which will be a part of this school. Those roles and characteristics described in previous sections of this report will not be duplicated here.

Principal

The principal is considered to be the key person in the community school. It will be the principal who will set the tone and climate within the school, and between the school and community. He will not only be the leader of the school, but also be deeply involved in neighborhood affairs. His neighborhood role will be equally as important as his school role. Maintaining a sensitivity to the problems and aspirations of the people of the community served by the school should receive his special emphasis. He must have all the qualifications described for principals of existing elementary schools in Springfield, plus a sincere desire to make the school an integral part of the life of each community resident.

To help him in his role, the Committee recommends that two advisory committees be formed: one oriented around the community aspects of the school; the other around school curriculum and administration. The membership of the Community Cabinet should include representation of community residents, and public and private agencies. A suggested list for the Community Cabinet might include one representative each from Parks and Recreation, Welfare, Community Council, Employment Security, North End Community Center, Child and Family Service, Adult Education, Human Relations Commission, school-community health team, and four

residents of the community. The assistant principals and Community School Coordinator would also be included in this cabinet. The principal or his designee would be chairman.

The Administrative Cabinet will concern itself with education and school oriented problems; such as curriculum, scheduling, new teaching techniques and materials, etc. Membership on this committee could include representatives of the teaching staff, (one from each team), school curriculum representatives in science, math, social studies, reading, foreign language, and language arts, the assistant principals, the school-community health team, school-community library, service personnel and four residents. As in the previous case, the principal or his designee would be considered permanent chairman. The residents on each team should be representative of as large a segment of the neighborhood population as possible.

It should be re-emphasized at this point that the Cabinets are advisory committees only, and that the final responsibility in the decision making process rests with the principal. It is understood that he will not be inflexible in this role.

Assistant Principals

Two assistant principals are recommended. Although both will have direct line responsibility for school personnel in all programs, it is suggested that there be some division of emphasis. For example, the basic responsibilities of one may be educational, the other community services centered. It is important that both work closely and cooperatively on the total program, however.

In addition to the normal on-going school program, the assistant principals will be responsible for developing a comprehensive communi-

ty services program under the direction of the principal. They will solicit and utilize volunteer and paid staff from all sources. Training programs to upgrade the quality of program leadership should also be a part of their responsibilities. Their relationship with the community will be an important concern, for it is through this relationship that they will determine and stimulate interests in a variety of programs.

The qualifications needed by the assistant principals are identical with those of the principal. It may be desirable for the assistant principal charged with responsibilities for community services to have special background and experience in community organization, group work, and social services as well as that required in education.

Community School Coordinator

The vast number and variety of after school and evening programs anticipated for this school will require the services of a coordinator. The Community School Coordinator will be directly responsible to the assistant principals and principal. His function will be to facilitate and coordinate all activities utilizing space in the Community School which are outside the children's normal educational program. He will assist the assistant principals and principal in their responsibility for identifying needs, acquiring and training leadership, and developing and organizing the programs. The coordinator will be an important contributor to this process of establishing programs to meet community needs. The CSC will have no line responsibility for personnel.

Qualifications for this position would include knowledge of the

community served by the school, ability to develop cooperative working relationships with a variety of agencies and individuals, some knowledge and experience in education, recreation and social service, and dedication to the community school concept. Although all administrative personnel will be a part of the total program, the CSC will be expected to be present after school hours. His regular hours might normally be from three or four o'clock to ten o'clock. Some means of coordinating the program on Saturdays and Sundays should also be devised.

It should be re-emphasized that public and private agencies sharing this facility will normally be autonomous within their own organizational structures. The only imposed requirements will be those needed for intra-agency cooperation, and proper care and use of the facilities.

CHAPTER XVII

EDUCATIONAL SPECIFICATIONS

The program described in the preceding sections of this report have direct implications for the design and physical requirements of the North End-Brightwood School. The Committee has attempted to provide general guidelines for the space requirements necessary to implement the recommended programs. It should be understood that the following suggestions for space are only tentative. Space requirements and design factors are interdependent. One cannot be stated with any degree of accuracy without knowledge of its effect on the other. It is hoped that the Committee's suggestions will be helpful in spite of their indefinite status. The section indicating general space needs is followed by specific facility requirements deemed important by the Committee.

General Space Requirements

I. Building Education Facilities	Approximate Area
A. Administrative Area	1,200

Waiting Room
Principal's Office
Two Assistants to the Principal's Office
Clerk's Office
Toilet
Storage Room
Conference Room (About 20 people)

	Approximate Area
B. Classrooms	
Ten classrooms for grades 4-6 (50' x 80')	40,000
Five auxiliary classrooms (Mentally Retarded children) (24' x 40')	4,800
Two classrooms for Emotionally Disturbed Children (24' x 40')	1,920
Two Adult Education Classrooms (24' x 40')	1,920
One workshop for Special Classes (20' x 30')	600
C. Teachers' Work Areas, Lounges, Storage	4,000
D. Teachers' Planning and Conference Rooms (12' x 12') (one for each team - ten teams	1,440
E. Reading Area (Equipped for both day and evening use)	1,800
Waiting Room (16' x 24')	
Small Conference and Testing Room (10' x 10')	
One small room for a reading clinician (16' x 24')	
One room for use mainly after school and in the evening for junior and senior high classes and adults; to be used (during the school day) for demonstration lessons in in-service training of teachers. (35' x 24')	
F. Library Area	15,000
Reading rooms for elementary school children	
Reading room and Study room for secondary school students and adults	
Librarian's workroom	
Office for Librarians	
Conference Rooms	
Area for Audio Visual Equipment	
Resource Center, for sample copies of teaching materials, and for use as a workroom for preparing materials	
Computor terminal	
Fifteen listening stations	

		Approximate Area
G.	School Health Area (Adjacent to Clerk's Office)	1,080
	Waiting Room Examining Room Nurse's Office Toilet Four cubicles for children who are ill Storage space for blankets and supplies	
H.	Counselling Area	1,200
	Three rooms for elementary school counselor Room for psychological examiner Room for consulting psychologist and psychiatrist	
I.	Language Laboratories (2)	1,680
J.	Audio-Visual Area (Tape decks, Tape Storage)	200
K.	Art Area	5,600
	Art Workrooms (4) Supply Room Storage Team offices	
L.	Music Area	4,700
	Room for large group instruction Listening Room Six practice rooms for individuals and small ensembles Team Office Storage area	
M.	Science Area in each wing	2,000
	One room One storage room for all science equipment and supplies One Planetarium Room	400
N.	Auditorium (300 Capacity)	4,000
O.	Gymnasium	13,000
	Shower Rooms Locker Rooms Toilets Storage Rooms Corrective Room for Atypical Children	

		Approximate Area
P.	Swimming Pool	7,400
Q.	Cafeteria	4,000
R.	Kitchen and Storage Spaces	1,700
S.	General Store rooms and Storage Spaces	2,000
T.	Custodial Offices	200
II.	Community Service Facilities	
A.	Office for Community Coordinator	120
B.	Health Facilities	2,000
	1. Waiting Room 2. Examination Rooms (2) 3. Nurses Offices (2) 4. General Office 5. Consultation Rooms (2) 6. Dental Center	
C.	Employment Security	300
	1. Testing Room 2. General office	
D.	Social Work Facilities	400
	1. Waiting Room 2. General Office 3. Three casework offices	
E.	Tutorial and Arts and Crafts (Children)	2,100
	1. General office 2. Tutorial cubicals 3. Arts and Crafts	
F.	Teen-age Drop-in Center	3,000
	1. Kitchenette 2. Lounge and game area 3. Activity area	
G.	Drop-in Center for Elderly	750
	1. Lounge 2. Game Room	
	Total	130,510

Specific Requirements

I. Educational Facilities

A. Administrative Area
Waiting Room
Conference Room
Principal's Office
Outside entrance
Natural light
Adjustable book shelves over cabinets (adjustable cabinet shelves and cabinet doors with locks
Toilet in principal's office (outside wall)
One entrance from main corridor
Assistants to the Principal Offices (2)
Program Director's Office (and assistants')
Same as principal's, located adjacent to clerk's office (separate offices)
Clerk's office
Natural light
Toilet facilities for clerks
Intercommunicating door to principal's office
Located nearer front door than principal's office
Mail facilities in clerk's office
U.F. duct for telephone, intercom, and electrical appliances
Located to afford opportunity for supervision of corridors and health suite.
Counter 30" high with lockable folding steel gate.
Bulletin board - 3' x 4' - top lighted, shelf included 12" x 4'.
Wardrobe for principal's and clerk's, supervisors (rod and shelf lock on door)
Walk-In Safe
Administrative Area arranged to be closed off and locked

B. Ten Classrooms -(80' x 50')
Five Auxiliary Classrooms
Two Emotionally Distrubed Classrooms
Two Adult Education Classrooms
Rectangular shape - ceiling height sufficient for adequate light and ventilation (avoid excessive lowness - minimum 12'). Include borrowed light from classroom to corridor
Outside door and corridor door
Chalk boards - type that can be washed - Armor plate or equal - colors to be selected to prevent glare and eye strain, not black
Map and chart rails over chalk board
Tack board over chalk boards for alphabet penmanship cards ONLY
Minimum length 24' at each teaching station
Ample chalkboard space, 24 running feet
Reversible if possible to accommodate class
Adjustable to height

Tack board
Corridor classroom doors with long narrow rectangular panel of unbreakable glass so that classroom is visible without opening door
Outside classroom doors solid panel
Lock in each classroom door
Multiple electrical duplex outlets located on each wall and away from sink
Two sinks with warm and cold water with counter space.
One piece formica counter from 20" above rear sink wall - covering the 24" counter top - ending with 1-1/2" moulded front edge
Two capped bublers with extension arm located at sink
Cabinet - substantial shelves under sink and counter top - enclosed with hinged doors.
Provision for permanent fixtures in ceilings for hanging mobiles, displays, etc.
Locable shelves in univent installations (window wall)
Teacher's wardrobe with rod, shelves and lock on door
Screen for each classroom. Screen mounted on wall or in ceiling.
Each classroom to have own folding partition from floor to ceiling permitting sub-division of the room into four equal parts
Corridor bulletin board 3' x 4'-30" from floor lighted, recessed, some with sliding glass, lockable doors
Classroom cloakrooms, ventilated, lighted, 2 shelves (one high, one low), 1 foot per cubicle - one row only - 100 hooks, mud tray, sliding doors, sanotized
Air-condition the entire building
Wall to wall carpeting in entire building of offices and classrooms, and in corridors
Recessed rubber mat at each outside door
Small clocks located low on wall; approximately 10" face, Arabic numbers
Light control - Drapes - Rheostatic control of lights
Open out windows in removable casings
(glare-proof glass) 40" in height
Removable to allow for repair cutside the room
Acoustical treatment of room to reduce reverberation within room and prevent transmission of sound to adjacent rooms
Flush mounted speakers located in each end of classroom ceiling
Provide terminals for five listening stations

Workshop Arrangement - Equipped with woodworking and domestic arts facilities for Auxiliary pupil use

Two Day Time and Evening Adult Education Classrooms
Include in Health and Adult Wing
Equipped with ranges, sinks and other facilities for food, clothing and health classes

Suggestions for chalk boards, tack boards, peg boards and map rails:

For Classrooms-
The tack boards, and chalk boards not be cut up into small areas such as small spaces between cupboards, in corners, between windows or on coat-cupboard panels. Fixtures are not to be placed on chalk board and tack board
The chalk board placed so that the lighting will make it possible for pupils to read material easily from all of the stations
Tack board over the chalk boards for alphabet-penmanship cards ONLY
Provide for multiple map rack

C. Reading Area (equipped for both day and evening use)

Waiting Room, about 16' x 24'. Shelves and cabinets for teachers to keep books and supplies which they share. Place for students and parents to wait for appointments. Tackboard for displays
Conference and Testing Room, about 10' x 10'. Large enough for two or three persons, for housing such testing instruments as the telebinocular, for files or other storage for tests, etc.
Room for Reading Clinician, about 16' x 24'. (for about 12 pupils and a teacher) Tackboard and chalkboard. Built-in screen in each room. Book shelves and cabinets. Rooms equipped with five listening stations for individual or group use of tapes.
Room for secondary school students and adults, about 35' x 24'. For use with classes up to 20. Equipped with tackboard and chalkboard, study carrels, cabinets and shelving. One-way glass and sound equipment between this room and the Clinician room to provide an opportunity for in-service training of reading teachers. Outside entrance for evening use.

D. Library Area (partly for regular daytime use, partly for after school and evening use)
(Details of space requirements are being revised at this time)

E. Health Area (Adjacent to Clerk's Office)

To be located adjacent to Administrative Offices
Waiting room approximately 10' x 12' - separate from examination room by a full height partition
Conference and examination room approximately 18' x 24' with sink (liquid soap dispenser), counter, built-in locked cabinets and closet.
Nurse's Office - (10' x 12' glass partition)
Wardrobe for nurse
Two toilets, one for boys and one for girls
Four cubicles with suspended curtains for cots
Storage space for blankets and supplies

F. Counselling Area (wardrobe in each room)

Three rooms for elementary counselors
Room for psychologist
Room for consulting psychologist or psychiatrist
Waiting Room
Toilet facilities
Rooms soundproofed and located out of main traffic area of school

G. Language Laboratory (2)

Separate rooms to be used by night students as well as day pupils
Permanent installation consisting of
25 listen-respond-record pupil stations
Because of the dual usage, a retrivial type system should be considered
Second laboratory in or adjacent to the music area

H. Audio-Visual Room (Tape decks, tape storage, Video equipment)

I. Art Area

Four rooms (30' x 40')

Common access to all rooms
Storage space
Three sinks
Chalkboard 48 square feet per room
Provision for a kiln
Bulletin boards 100 square feet per room
North light if possible
Ceiling 10 feet high
Provision for electrical tools
Sound proofed
Three kitchen units
Three clothing units
Washer and Drier

J. Music Area (to be arranged with auditorium)

Room for large-group instruction (40' x 50' ceiling height 14')
Built-in cabinets with locks and counters for storage of equipment and supplies.
With movable soundproof partition to provide two teaching stations, 24' x 40' each.
Intercommunication and Clock System in each area.
Tackboard in each of the subdivisions
Projection facilities in each of the subdivisions
Chalkboard - 16' with tackboard on remainder of wall.
Conduit jacks for phonograph two speaker system in each of the subdivisions.
Sink with bubbler.
Duplex AC outlets
Speaker for outdoor music
Fluorescent lighting.

Listening Room (16' x 24')
- A 14 stereo- position listening table connected to the tape decks with separate position inter-communication to console in teacher's office.
- Cabinets for record storage.
- Glass window for supervision from teacher's office.
- Duplex AC outlets
- Fluorescent lighting.

Six Practice Rooms for individual and ensembles (12' x 14')
- Acoustical treatment for sound proofing and sound isolation.
- Glass partition in door for supervision from teacher's office.
- Provision for tape recording from console in teacher's office.

Teacher's Office (12' x 16')
- Built-in cabinets and counters for storage of supplies.
- Storage area to be built-in cabinets in large group room, listening room, and teacher's office.
- Wall-to-wall carpeting in Listening Room and Practice Rooms.

K. Science Area

First floor with a separate outdoor exit.
The end room of a corridor or wing would be preferable.
One wall facing South with maximum natural lighting provided.
Close to the arts and crafts facilities.
2,000 square feet.

A big sink built in the floor, 1" sides like the bottom of a shower stall. (cleaning aquaria and cages)
- Hose attachment to the water outlet for filling aquaria, cleaning cages and watering plants in other parts of the room.

Two conventional large sinks with hot and cold water.
- Paper towel dispensers by each sink.

100 AMP service with its own circuit breaker, electrical outlets generously distributed round the room.
- Electric stove or heating units for teacher demonstrations (no open flames)
- Refrigeration facilities for food for animals and cultures with a freezer section to provide extreme temperatures for making ice.

Closed storage area for supplies and equipment.
- Open shelves for storage of books
- Horizontal storage cabinet for printed material, charts and pictures.
- High shelving for displaying children's projects.

Special Features
1. Indoor-outdoor animal cages built into the building.
2. Patio or court for outdoor sciences with a special assortment of plantings (different types of trees, etc.)

4

L. Teachers' Workroom (Details to be provided.)

M. Teachers' Lounge - one adjacent to each work area.
Built-in sink-stove-refrigerator-counter with necessary electrical outlets, plumbing and waste lines.
Intercommunication, P.A., bell and clock connections to this room.

N. Auditorium
Facilities planned for community use - 300 capacity.
Locate so that public access to other parts of the building may be restricted.
Storage - approximately 15' x 20'.
Consider means of dividing auditorium by movable sound proof partitions.
Audio-Visual facilities in each area when partitions are in place.
Intercommunications, P.A., clock system in each area.
Individual lighting control in each area.
Recessed bubbler located in corridor outside auditorium
Vinyl asbestos tile flooring
Provisions made for checking clothing.
Zoned heating system.
Proper ventilation.
Walls and ceiling acoustically treated. (Windows placed above wainscoting on the side walls approximately 1[illegible]' from floor, if used)
Exit doors designed and located not to interfere with the function of the room.
No windows at end opposite the stage.
Lighting
Not by skylights.
Maintain adequate lighting for classroom use.
Facilities for Audio-Visual projection.
Light control.
Platform or stage.
Electrically operated projection screen the size to be determined by the dimensions of the room.
Independent P.A. system with flush mounted speakers.
Three microphone input receptacles in floor on stage or platform.
Cage with an A.C. outlet and a light in which to permanently house the P.A. amplifier and a cabinet in which to store extra equipment such as microphones and stands.
Facilities for hanging platform curtains, borders, legs, border lights, projection screen.
A.C. outlet in front center of platform.
Floor of Auditorium.
A.C. outlet receptacle for slide projector with 5" lens
A.C. outlet receptacle for motion picture projector with 2" lens placed the proper distance so that picture image will fill the screen.
Conduit with speaker cable anong side of A.C. outlet for motion picture projector to carry signal from sound trace of film to amplifier of local P.A. system, T.V. reception.

O. Gymnasium

The gym, shower, toilet, locker rooms, and the swimming pool should be located so that public access to other parts of the building may be restricted.
Floor space: (106' x 75' x 22' high)
A recessed motorized soundproof folding partition with a door to provide passage from one gym to the other. When closed each gym will be 53' x 75'
Storage room for each gym 15' x 20'. Provide 6' double doors
Zoned heating system.
Recessed bubbler in each gym with 40" x 40" rubber tile on floor in front of bubbler.
Maple flooring, first grade lumber, with lines for games, dimensions to be furnished by Physical Education Department.
Proper ventilation.
Walls and ceiling acoustically treated.
Windows placed above wainscoting on the side walls, approximately 14' from the floor. Tinted glass in east, west, and south exposures.
Recessed bleacher seats for approximately 500.
Exit doors designed and located not to interfere with the function of the room.
Lighting: Maintain 40-50 foot candles measured from 4' above floor. No skylights.
Chalkboard approximately 4' high x 5' long with built-in eraser and chalk receptacle - on moveable partitions.

P.A. System should have facilities to originate from the Gym area. (If Gym area divides, the system should allow for this and be designed to cover each area independently.)
Gymnasium Equipment, Attached to Building-
Two sets stall bars each set is to have four 3-foot sections, one set for each gym.
Eight climbing ropes for each gym.
Three basketball backstops for each gym.
Two horizontal bars - one for each gym.
Volleyball floor plates and standards with reel and ratchet for volleyball net cable for each gym.
One horizontal ladder for each gym.
Shower, locker and toilet rooms - located in area with ready access to pool and in an area which can be restricted from other parts of the building when desired.

Boys and Men

Two locker rooms, each approximately 15' x 20'
Shower room approximately 15' x 20' with 18 individually controlled shower heads, and soap dispensers.
Drying room approximately 11' x 12'
Provide towel hooks
Toilet facilities, sink and counter space and threemmirrors.
Non-slip tile for the above.

Girls and Women

Locker room approximately 15' x 20'
Shower room - provide minimum of 20 shower cubicles and 20 dressing cubicles
Sink and toilet, counter space and 3 mirrors.
Ten hair driers.
Non-slip tile for above

Corrective Room (Atypical Children)

Approximately 40' x 60'; acoustically treated
Provide - 2 sets stall bars, four sections each set
Wall length mirror, sliding cover to protect the glass when not in use.
Two Horizontal Bars
Four sets of Pulley Weights
Two large mats, 30' x 30'
Two Peg Boards
One Horizontal Ladder
Two Ballet Bars

P. Swimming Pool - restricted area from other areas of the building.

Pool 42' x 75', 5 lanes; number of lanes marked in pool.
Roll-out bleachers to seat approximately 150
Diving Board
Pool to be equipped with all safety devices
P.A. System with ability to originate from this area and should have facilities for under water instruction.
Two dressing spaces for instructors, approximately 10' x 10' with shower - one in boys' dressing room and one in girls' dressing room.
Acoustical treatment of walls and ceiling
Deck space - non-slip tile; one side minimum of 16' of deck space; double-doors from outside.

Q. Cafeteria

P.A. System with ability to originate from this area
To accommodate the number of pupils participating in the lunch program (hot and cold lunch), Two cafeterias seating 275 each at two lunch periods will be needed, with space for expansion
Install breakfast bar
Screens and screen doors
Acoustically treated material should be used
Carpeted floors
Movable furniture
Outdoor area for eating lunch close to toilets and play area

R. Kitchen and Storage Spaces

Based on 75% participation in the Hot Lunch Program (approximately 850 meals)
Allow 1700 square feet of floor area. Length of room - not more than twice the width. Shape of room to be discussed with School Lunch supervisor.

Floors - slip resistant, floor drains
Walls - glazed tile with curved base at floor for cleaning purposes
Windows - located to provide cross ventilation. Sill height approximately 48" to allow for placement of wall equipment.
Screens and screen doors
Receiving Platform - 6' width from front to back
Adjacent to storeroom and kitchen, and away from student traffic and play area.
Constructed of slip resistant concrete, with reinforced edges of steel angle iron. Constructed at same level as entrance.
Storage Area - allow 500 square feet of floor area
Doors - at least 40' wide
Windows - push up type, with locks and screens. Installed to avoid interference with shelving.
Ventilation - four six changes per hour. Area to be kept free of uninsulated pipes, refrigeration condensing units or other heat producing devices.
Non-Food Storage - paper goods, cleaning supplies, etc. Allow 80 square feet.
Employees Rest, Toilet, and Dressing Room.
Enclosure provided for early morning deliveries to protect foodstuffs from weather and animals
Provision for disposing of refuse and waxed milk cartons

S. Storerooms and Storage Spaces

For custodians:
One for Operation of Plant equipment in building and another for custodial supplies.
One large with outside exit for lawn mowers, snow plows, jeep etc. - double door or overhead doors and ramp.
Large storeroom for general school supplies near office with shelves on wall and through center of room.
Number of storerooms needed will be determined by design and layout of building
Storerooms for Audio-Visual equipment, 6' x 10', with light and A.C. outlet with a 15" deep shelf located 5' from floor - one for each floor or wing
Storeroom for musical instruments, 6' x 8'
Small storage space in health suite
Storeroom for kitchen supplies
All delivery areas located away from play areas and consolidated if possible - road to central delivery area designed to protect pedestrians
Receiving storage rooms and delivery area should be adjacent to loading platform - tailgate height
Central vacuum cleaning system

T. Toilet Rooms

Located to accommodate enrollment of school without congestion
Separate boys' and girls' toilet rooms between each two classrooms
Toilets in gymnasium located in locker room unit and shower area - public toilets for legal coverage for adults who use gymnasium

Toilets in custodian's room, principal's office, teachers' rest room, health suite and for cafeteria workers (clerk's)
Boys' and girls' toilet rooms not adjacent or opposite each other
See "VI. Building Needs for Out Door Play".
Mirrors not located over wash basins
Liquid soap dispensers - metal globes if individual dispensers are used
Floor drains in each toilet room
Cold water hose connection available for maintenance
Ceramic tile construction

U. Custodian's Room

Located near boiler room
Lockers
Toilet and shower

V. Incinerator Space

Near kitchen and boiler rooms with easy access to use and also to remove ashes
Carefully planned to avoid odors or smoke in building
Chimney above roof

W. Slop Sink Spaces

Located at strategic places (not near girls' toilet)
Shelves for custodial supplies
Terrazzo floor and base
Floor drain
Racks to hang mops, brooms, etc.

III. Communications

Console for building P.A. System and telephone intercommunication system located in secretary's office with provisions for remote emergency announcements (Red Phone), provision for three speed record player, AM and FM radio and hand microphone
Retrieval system programs
Amplifier, equipped with a V.U. (volt output) meter
Speakers (one way), flush mounted in center of all classrooms and teachers' work room ceilings, auditorium (2 in auditorium), lunchroom and custodian's room. Telephone hand sets for two way communication.
Control switch and warning device
Trumpet type speakers for custodian's area, play area, and outside of building
T.V. conduit and cable connecting all classrooms
T.V. conduit and cable system for auditorium
Hi-Fi with AM and FM multiplex

Projection Screen
(There is a possibility that additional equipment may be desirable when specific information is available on the actual physical facilities to be set aside within the building for community use)
Special study on speaker system for
Gym - same system as that planned for Kennedy School
Pool - same system as that planned for Kennedy School plus underwater speakers
Auditorium
Playground - portable P.A. system, A.C. outlets available
Club and Game Rooms

IV. Outdoor Play Areas - accessible from outside as well as inside
Director's Office
Approximately 12 acres - water bubblers
Four tennis courts, hardtopped, enclosed with 8 foot fence
Three baseball diamonds; one 60', one 75', and one 90' each with infields cut
Four handball courts
Loam and seed playing area within the 1/4 mile track
Three jumping pits - one shot put circle - one discus circle - one soccer field, loam and seed
One football field
Four hardtop areas; two 85' x 90'; two 40' x 50'
Artificial skating area 200' x 200', bubble covered top, separated by movable partitions
One for hockey and one for public skating, provide sound including console
Close proximity to the school in order to utilize the warming room for changing shoes and skates. Provide with lights and storage area for ice equipment approximately 15' x 20'
Remaining area graded - loamed and seeded
A permanent or portable P.A. system should be considered for the playground and skating areas. The possibility of using remote T.V. cameras for monitoring and for general security should be considered. This should not be confused with an Educational T.V. Facility.
Development of a Mini-Zoo

Outdoor Equipment
Tennis posts and nets complete with reel and ratchet
Eight outdoor double standard basketball posts with 3' extensions
Volleyball posts, two sets
Hockey goals, one set
Two slides
Two Horizontal ladders
Two Jungle Gyms
Two Triple Turning Bars
Three Baseball backstops
Two Six-swing sets
One Merry-go-round, enclosed, 10' diameter
Six Crawl pipes

Six permanent benches, around the basketball court
Six sets Portable Bleachers - approximately 60 seats per set
One axle for transporting bleachers

V. Pre-School Play Area with accommodations for mothers and children

Two sets six-kindergarten chair swings
Two two board standard see-saws
Twelve five foot benches
One set climbing trees
One slide, 10' high
Separated by shrubbery if possible
Plant shade trees

VI. Senior Citizens Area

Three tables
Three shuffleboard courts
This area to be separated from all other areas
Six benches
Plant shade trees

VII Building Needs for Outdoor Play - All accessible from outside as well as inside
Director's office 12' x 14'
Toilet rooms accessible directly from playground
Storage space with double doors directly from playground for play equipment approximately 12' x 15' with shelves
Storage space with double doors directly from playground for grounds equipment approximately 20' x 20'
Two team rooms directly from playground approximately 39' x 15' - provide 36 clothes hooks in each, adjacent showers (8 shower-heads individually controlled), built-in liquid soap dispensers, drying rooms and toilet facilities.
First Aid Room, 9' x 12', in-wall cabinet with lock
Warming Room must be close to the skating area, approximately 25' x 40', with benches, in-wall cabinets for shoes and skates
Connect woth toilet facilities for team rooms
Composition of floor of such a quality as to protect skate blades, example: Skatetile
Provision for ramps from warming house to skating area, composition of ramp such as to protect blades
Small area for coffee and snacks

VIII Site Development

Provide 7' sidewalk from all classrooms with outside doors to main approach - 7' sidewalk from street to play areas
Loading platform at service entrance:
Locate away from front entrance and play areas
Provide paved service entrance to first floor storage rooms

All delivery areas located away from play areas and consolidated if possible
Roads to delivery area designed to protect pedestrian
Two off-street parking areas adequate for 150 cars, located away from classroom exits
Space for bicycles and bicycle racks
Parking area stalls should be marked and numbered
Play area should have proper drainage and be loamed, graded and seeded with exception of hardtopped areas - skating area
Avoid plantings and grass where they cannot be maintained
Provide shade trees for community and summer use and Senior Citizens Area and any other areas where it will not interfere or become a hazard for children or youth using the areas.

IX. General Suggestions

Public Telephone
Building equipped to shut off various sections
Terrazzo floors for corridors, kitchen, toilets, slop sink rooms, and exits
Non-skid-tile floor in shower, locker, and pool areas
Structural tile baseboard throughout building except storage areas
Structural tile or glazed brick walls in corridors, gymnasium, health suite and toilet rooms to a height mutually agreed upon by the School Department, minimum 6 feet.
Acoustical material in auditorium, gymnasium, cafeteria walls and ceilings
Safety glass in all fire-extinguisher cabinets.
Classroom lighting system designed in two circuits, window, wall, and corridor wall with separate switches
Electric or gas kitchen planned with the Director of School Lunch Program
Auditorium-Gymnasium, outdoor play areas
Standard equipment planned in conjunction with the Director of Health, Physical Education and Safety
Zoned heating
Zoned controls in auditorium, gymnasium, cafeteria,kitchen, office suite and classroom wings.
Supports for suspension equipment such as curtains, border lights and projection screen to be included in general contract. Placement of electric screen and controls to be planned with Supervisor of Audio-Visual Education. Electrical connections for border lights and projection screen to be included in general contract. Typical platform layout available at School Department.
Interior decoration
Architect's colors to be approved by School Department
Slop sinks located to best advantage for custodian (not adjacent to or opposite girls' toilet
One corridor display area (tack board and peg board) located near principal's office (no doors)
Doors
Narrow rectangular panel of wire glass in all inside corridor classroom doors

All doors with locks except pupil toilet doors. Public toilet doors with locks
Card holders for teachers' names on classroom doors.
Shelves in all closets (solid shelves, not slats)
Color throughout building planned with committee from School Department
Recessed rubber mats in corridor at all outside doors
All duplex outlets to be provided with a grounded receptacle 12" - 36" above floor
Venetian blinds - Levelor or equal - Provisions made for venetian blind installation
Unbreakable exterior lighting to illuminate outside school area
Highly placed (under-overhang) weatherproof cluster fixtures
Service areas - safe and consolidated if possible
Bubblers in classrooms located at sink. Recessed type located in corridors near auditorium in gymnasium, cafeterias
Teachers wardrobe and storage closet in each classroom; minimum of 24" depth
Loading platform tail-gate height, located to accommodate all deliveries, kitchen, supplies and food and regular school equipment
Fenestration in kitchen skylights should be tinted
U.F. Ducts be provided in General Office area, Principal's Office, and Counselor's offices for telephone, electrical and P.A. service
When single soap dispensers are used, provide a metal chrome or stainless steel container
Windows in classrooms should provide for adequate ventilation; top lite-out-swinging and bottom lite swinging into the room
Glass sizes should not be too large
Consideration should be given to the type of hardware used on outside doors for better building security
If a flat-topped single story building, arrange to have it impossible to gain access to roof by climbing. Suggested: out-afar reach overhangs and exterior doors that are not conducive to ladder-like scaling
Manual temperature controls; key operated throughout building
Outside entrances and recesses flood-lighted for better security
No glass in outside classroom doors

X. Civil Defense Area

With storage provisions for food and water.

SELECTED BIBLIOGRAPHY

Bair, Medill and Richard G. Woodward. Team Teaching in Action. Boston: Houghton Mifflin Company, 1964.

Barb, Walter J. "Who are the Educationally Retarded?" Education, LXXXV (April, 1965).

Borg, Walter R. "Ability Grouping in the Public Schools, A Field Study," Journal of Experimental Education, (Winter, 1965).

Bright, R. Louis. "The Time is Now," American Education, Vol. 3, (November, 1967).

Chall, Jeanne S. Learning to Read: The Great Debate. New York: McGraw-Hill, 1967.

Crosby, Muriel.E. "Good Report," NEA Journal, 51: 45-47, (April, 1962).

Crow, Lester D. and Walter I. Murray and Hugh H. Smyth. Educating the Culturally Disadvantaged Child. New York: McKay Co., 1966.

Crowley, Serena Virginia. "The Place of Information and Referral Centers in Community Planning," Community Organization, (1960).

DiLorenzo, Louis T. and Ruth Salter. "Cooperative Research on the Non-graded Primary," The Elementary School Journal, Vol. 65 (February, 1965).

Fink, David R. "The Selection and Training of Teachers," The National Elementary Principal, Vol. XLIV (January, 1965).

Flint Public Schools. Community School Directors Training Guide. Flint, Michigan: Mott Program Division.

Goodlad, John I. and Robert H. Anderson. The Nongraded Elementary School. New York: Harcourt, Brace & World, 1963.

Gordon, Edmond W. and Doxey A. Wilkerson, Compensatory Education for the Disadvantaged. New York: College Entrance Examination Board, 1966.

Gore, Litham. "The Nongraded Primary Unit," School Life, XLIV (March, 1962).

Harris, Chester W. (ed.) The Encyclopedia of Educational Research, Third Edition. New York: MacMillan, 1960.

Havighurst, Robert J. Education in the Metropolitan Areas. Boston: Allyn and Bacon, 1966.

Hellmuth, Jerome, (ed.). Disadvantaged Child, Part I. Seattle: Hellmuth, 1967.

Heathers, Glen. "Research on Implementing and Evaluating Cooperative Teaching," The National Elementary Principal, (January, 1965).

Hillson, Maurie. Change and Innovation in Elementary School Organization. New York: Holt, Rinehart, and Winston, 1966.

Kohl, Herbert R. Teaching the Unteachable. New York: New York Review, 1967.

Michaelis, John U. (ed.) Social Studies in the Elementary Schools. Washington, D.C: National Council for the Social Studies, 1966.

National Conference on Social Welfare. Community Organization. New York: Columbia University Press, 1959.

Pearl, Arthur and Frank Reissman. New Careers for the Poor. New York: New York Free Press, 1965.

Price, Roy A. and Warren Hickman and Gerald Smith. "The Curriculum Content," in New Frontiers in the Social Studies: Action and Analysis, by John Gibson, Citation Press, New York, (1967).

Reissman, Frank. Helping the Disadvantaged Pupil Learn More Easily. New York: Prentice-Hall, 1966.

_____. The Culturally Deprived Child. New York: Harper & Row, 1962.

Ryans, David G. Characteristics of Teachers. Washington: Washington American Council on Education, 1960.

Schragg, Peter. Voices in the Classroom. Boston: Beacon Press, 1965.

Skipp, Mary D. "Teacher Aides: A Survey," The National Elementary Principal, Vol. XLVI (May, 1967).

Shaplin, Judson T. and Henry F. Olds, Jr. (ed.). Team Teaching. New York: Harper and Row, 1964.

Tirozzi, Gerald N. Conte Community School. New Haven: Board of Education, 1967.

Wendt, Paul R. Audiovisual Instruction. Washington, D.C: Department of Classroom Teachers, NEA, 1966.

OTHER SOURCES

Almgren, Herbert P., Chairman, Springfield Area Community Health Study - Recommendations, Community Council of Greater Springfield, Springfield, Massachusetts, December, 1965.

Board of Education of the City of New York, Curriculum Bulletin 1965-66 Series, Number 19, Extended School Services Through the All-Day Neighborhood Schools.

Citizens Group Services Study Committee, A Study of Recreation and Group Services in the Greater Springfield Area of Massachusetts, Springfield, Massachusetts, December, 1965.

Community Council of Greater Springfield, Inc., An Assessment of Leisure Time and Recreation Resources in the Pioneer Valley United Fund Area, Springfield, November, 1966.

_____. Community Council Study Report on Request for an Additional Worker for the Salvation Army, 1966.

Detroit Public Schools, A Program for the Use of Paraprofessional Staff in the Detroit Public Schools, Special Projects Division, 1965.

Fantini, Maria D. and Gerald Weinstein, "Social Realities and the Urban School," a paper presented at the ASCD Conference, Atlantic City, New Jersey, March, 1968.

Franseth, Jane and Rose Koury, Survey of Research on Grouping as Related to Pupil Learning, U.S. Government Printing Office, Washington, D.C., 1966.

Goglia, Ralph M., The Community School Program in New Haven, New Haven Board of Education, 1967.

Goldberg, Barton, Community Renewal Program, Population, Springfield Planning Department, 1965.

Keough, Francis P., Public Library Service for the North End-Brightwood-Atwater Park Area of Springfield, May, 1968.

McLean Mary C., An Annotated Catalogue of Selected Films in the Field of Science and Guides for Their Use with the Mentally Retarded, Unpublished doctoral dissertation, 1950.

Naslund, Robert Albert, The Origin and Development of the Community School Concept, Unpublished Doctoral Dissertation, Stanford University, 1951.

National Conference on Social Welfare, Community Organization, New York: National Conference on Social Welfare, 1959.

National Council for Social Welfare, "A Partnership in Urban Renewal," Planning Social Servicas for Urban Needs, Columbia University Press, New York, 1959.

National Education Association, Research Report "Nongraded Schools," National Education Research Memo, NEA, Washington, D.C., May, 1965.

Pearl, Arthur, "New Careers and the Manpower Crisis in Education," A paper presented at the New Symposium on Educational Manpower, Washington, D.C., 1967.

Petrunenko, Constance, Agenda of a meeting held by a committee planning a health program in Riverview, September 26, 1967.

Report from Educational Facilities Laboratories, Schools Without Walls, Educational Facilities Laboratories, Inc., New York, 1966.

Report of the "Greater Springfield Social Studies Curriculum Institute", Summer, 1967, Springfield, Massachusetts.

Springfield School Department, Health Services in the Schools of Springfield, Springfield, January 1966.

Sherburne, Mary Lela, The Cardozza Model School District - A Peach Tree Grows on "T" Street, Quarterly Report of Educational Development Center, Inc., 1967.

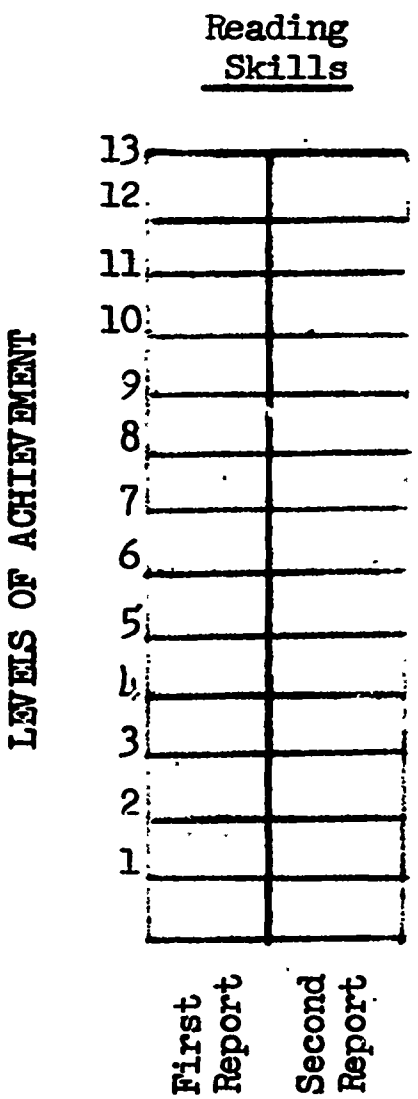
Appendix A

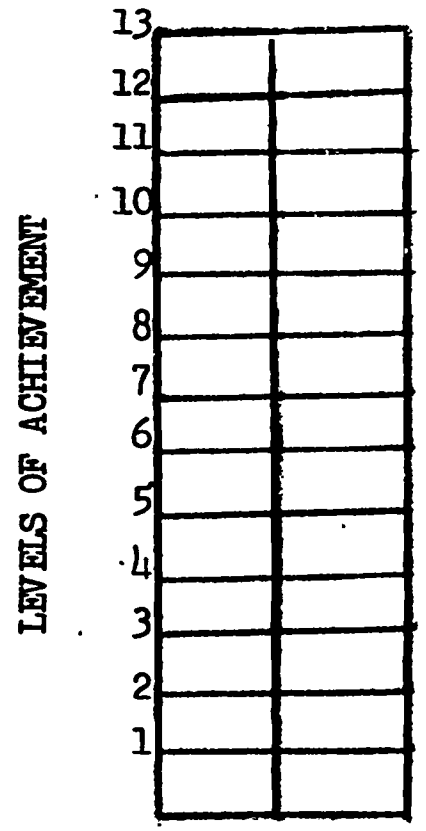
Personal Growth

Attitudes		
Work Habits		

GOOD FAIR POOR = Progress for YOUR CHILD

Communication Skills		
Spanish		
Social Studies		
Science		
Physical Education		
Art		
Music		
Instrumental Music		





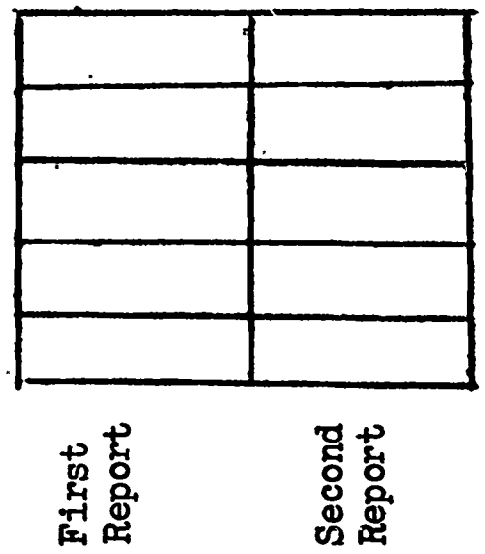
Especially good progress shown in.....

Especially good effort shown in.....

Extra help needed in....

Extra effort needed in..

Material is included for work at home in.....



Appendix B

ACADEMIC AIDES

	DUTIES	TRAINING AND REQUIREMENTS
LEVEL I GENERAL SCHOOL AIDE	1. LIGHT HOUSEKEEPING 2. GET SUPPLIES 3. STAMP BOOKS 4. IN CHARGE OF MILK DISTRIBUTION 5. MONITORIAL 6. MIX PAINTS 7. RELATED DUTIES 8. LUNCH ROOM DUTIES	1. UNDERSTANDING OF CHILDREN 2. ABILITY TO COOPERATE WITH SCHOOL PERSONNEL 3. BRIEF ORIENTATION PERIOD IN HUMAN DEVELOPMENT, SOCIAL RELATIONS AND THE SCHOOL'S GOALS AND PREDEDURES
LEVEL II TECHNICIAN AND/OR SPECIALISST	1. OPERATE AUDIO-VISUAL EQUIPMENT 2. CLERICAL AND TYPING 3. MAKE FLASH CARDS AND CHARTS 4. DUPLICATING MATERIALS 5. REQUISITION CLASSROOM SUPPLIES 6. HANDLE MONEY COLLECTIONS 7. KEEP REGISTER 8. RECORD TEACHER TEST RESULTS, MINOR REPAIRS, MAINTENANCE OF AUDIO-VISUAL, SCIENCE TECHNICIAN, PHYSICAL THERAPY, SPEECH CORRECTION FOLLOW-UP 9. WORK IN LIBRARY 10. CORRECT PAPERS 11. FILING AND CATALOGING MATERIALS	1. UNDERSTANDING OF BASIC OPERATION 2. ABILITY TO COOPERATE WITH OTHERS 3. RELATED EXPERIENCE OR TRAINING (USE OF AUDIO-VISUAL AND OFFICE MACHINES) 4. APTITUDE FOR TRAINING 5. ABILITY TO KEEP ACCURATE RECORDS 6. HIGH SCHOOL DIPLOMA DESIRABLE
LEVEL III INSTRUCTIONAL AIDE	1. MORE RELATIONSHIP TO INSTRUCTIONSL PROCESS 2. REINFORCEMENT OF TEACHER INSTRUCTION 3. INDIVIDUAL OR SMALL GROUP WORK 4. AUGMENT CONCEPTS, SKILLS TAUGHT 5. SUPERVISION OF TESTING PROGRAM 6. ASSIST WITH UNIT WORK 7. HOME VISITS AND ORGANIZING SCHOOL PARENT MEETINGS 8. MORE WORK WITH PUPILS IN SELECTION OF BOOKS	1. HIGH SCHOOL DIPLOMA DESIRABLE 2. FIRM, PLEASANT PERSONALITY 3. INSERVICE TRAINING 4. KNOWLEDGE OF TECHNIQUES USED ON THE LEVEL 5. ACQUAINTANCE OF MATERIALS OF LEVEL 6. WORK - STUDY AS A BASIS FOR TRAINING

	DUTIES	TRAINING AND REQUIREMENTS
LEVEL IV ASSOCIATE	1. MORE RESPONSIBILITY WITH LESS SUPERVISION BY THE PROFESSIONAL 2. WORK IN CLOSE RAPPORT WITH TEACHER 3. SUPPLEMENT TEACHER LESSONS 4. AID CHILDREN WITH ACADEMIC TROUBLES 5. ASSOCIATE LIBRARIAN 6. ADMINISTER SOME TESTS	1. HIGH SCHOOL DIPLOMA 2. TWO-YEAR COLLEGE (OR EQUIVALENT) 3. CONTINUATION OF COLLEGE WORK FOR CERTIFICATION WHILE IN SERVICE
LEVEL V INTERN	1. DUTIES SIMILAR TO A STUDENT TEACHER UNDER 2 TEACHER GUIDANCE 2. DUTIES VERY SIMILAR TO THOSE OF ASSOCIATE BUT WITH MORE INVOLVEMENT IN DIAGNOSIS AND PLANNING 3. HELPING PUPILS IMPROVE SPECIAL SKILLS 4. ANSWERING THE CALLS OF PARENTS AND REFERRING THEM TO PROPER SOURCE	1. WORKING TOWARD B.A. OR B.S. DEGREE OR ITS EQUIVALENT, AND ENROLLMENT IN A COLLEGE OF TEACHER EDUCATION OR OTHER INSTITUTION WHICH OFFERS A PROGRAM LEADING TO CERTIFICATION
LEVEL VI TEACHER	1. RESPONSIBLE FOR INSTRUCTION CLASSROOM MANAGEMENT CHILDREN MEETING PHYSICAL, SOCIAL, EMOTIONAL NEEDS DEVELOPING PEER GROUP RELATIONSHIPS ESTABLISHING EFFECTIVE PARENT-SCHOOL RELATIONSHIPS ENCOURAGING COMMUNITY RESPONSIBILITY UNDERSTANDING NEEDS OF INDIVIDUAL STUDENTS IN SCHOOL AREA ETC.	1. REQUIREMENTS IN FORCE AT TIME

SCHOOL HEALTH AIDES

	DUTIES	TRAINING OR REQUIREMENTS
LEVEL I AIDE FOR CLERICAL AND FIRST AIDE DUTIES HEALTH AIDE	UNDER SUPERVISION OF THE SCHOOL NURSE 1. PROVIDE FIRST AID IN CASES OF SUDDEN ILLNESS, AND OTHER EMERGENCIES 2. WEIGHING AND MEASURING 3. CLERICAL A. RECORDING OF HEIGHT AND WEIGHT B. RECORDING OF PHYSICAL EXAMINATION RESULTS C. DENTAL EXAMINATION RECORD MAINTENANCE D. NOTIFICATIONS TO PARENTS E. IMMUNIZATION INFORMATION 4. MAINTAINING OF MEDICAL AND CLERICAL INVENTORY 5. HOUSEKEEPING 6. THE SANITATION AND SAFETY MEASURES NECESSARY IN A PUBLIC BUILDING	SAME AS LEVEL I ACADEMIC AIDES WHICH INCLUDED: 1. UNDERSTANDING OF CHILDREN 2. ABILITY TO COOPERATE WITH SCHOOL PERSONNEL 3. BRIEF ORIENTATION PERIOD IN HUMAN DEVELOPMENT, ETC. IN ADDITION, THIS AIDE SHOULD HAVE COMPLETED THE REQUIREMENTS OF A FIRST AID COURSE CLASSIFIED AS ADVANCED.
LEVEL 2A PRACTICAL NURSE	DUTIES ARE PERFORMED UNDER THE SUPERVISION OF AN R.N. OR M.D. AND INCLUDE: 1. BASIC BEDSIDE NURSING OF PATIENTS INCLUDING DIET TREATMENTS AND MEDICATION 2. RESPONSIBILITY FOR PLANNING HER OWN CARE OF PATIENTS WHO ARE NOT ACUTELY ILL 3. ABILITY TO FUNCTION AS A TEAM MEMBER 4. BASIC HEALTH TEACHING TO PATIENTS	IN ORDER TO BE ACCEPTED IN A FORMAL PRACTICAL NURSE TRAINING PROGRAM, ONE MUST BE A HIGH SCHOOL GRADUATE, OR BE OVER 35 YEARS OF AGE.
LEVEL 2A PRACTICAL NURSE (SUMMARY)		CLASS WORK AND CLINICAL WORK IS CORRELATED AND SUPERVISION IN THE CLINICAL AREA IS PROVIDED BY THE INSTRUCTOR. AT THE SUCCESSFUL COMPLETION, THE STUDENTS IS ELIGIBLE TO TAKE THE EXAM TO BECOME LICENSED BY THE STATE OF MASSACHUSETTS AS A LICENSED PRACTICAL NURSE.

	DUTIES	TRAINING OR REQUIREMENTS
LEVEL 2B DENTAL ASSISTANT (SUMMARY) DENTAL HYGIENIST	ALL WORK PERFORMED IS UNDER THE SUPERVISION OF A DENTAL HYGIENIST OR DENTIST. DUTIES PERFORMED INCLUDE ALL TASKS WHICH CAN BE DONE OUTSIDE THE MOUTH. THIS WOULD INCLUDE ALL CHAIRSIDE ASSISTING, AIDING IN MAKING IMPRESSIONS FOR DENTURES, AIDING IN PREPARING OF MATERIALS, POSITIONING AND PREPARING PATIENTS AND PREPARING FOR X-RAYS. IT ALSO INCLUDE BASIC OFFICE MANAGEMENT SUCH AS BILLING, FILING, ETC. STERILIZATION OF EQUIPMENT, MAINTENANCE OF OFFICE INVENTORY IS ALSO INCLUDED.	IN ORDER TO BE ACCEPTED IN A DENTAL ASSISTANT PROGRAM, ONE MUST BE A HIGH SCHOOL GRADUATE. THE PROGRAM'S DURATION IS ONE ACADEMIC YEAR INCLUDING THEORY AND CLINICAL PRACTICE. THE FOLLOWING AREAS ARE EXPLORED: 1. WORK IN A LAB FOR PRACTICE 2. SUPERVISED CLINICAL SITUATION FOR ACTUAL EXPERIENCE 3. COURSES INCLUDING BASIC ANATOMY AND PHYSIOLOGY OF TEETH AND MOUTH, PERTINENT MICROBIOLOGY, DENTAL SCIENCE, ENGLISH,,TYPING.
LEVEL 3 COMMUNITY HEALTH NURSE	TO PROVIDE MEDICAL SUPERVISION OF SCHOOL CHILDREN, TO SERVE AS INTERPRETER BETWEEN SCHOOL, HOME, AND COMMUNITY, UTILIZING AVAILABLE PERSONNEL AND AGENCIES TO BEST MEET THE HEALTH NEEDS NOTED. HAS RESPONSIBILITY IN PRESCHOOL CONFERENCES, COMMUNICABLE DISEASE CONTROL, MASS IMMUNIZATIONS, AND RELATED PROGRAMS. SCHOOL HEALTH SERVICE: 1. MAINTAINS AN INDIVIDUAL RECORD ON ALL CHILDREN 2. GAINS KNOWLEDGE OF IMMUNIZATION REQUIRED BY STATE LAW 3. HAS KNOWLEDGE OF AVERAGE GROWTH AND DEVELOPMENT PATTERNS 4. SECURES ROUTINE PHYSICAL EXAMINATIONS 5. REFERS AND DOES "FOLLOW UP" ON ANY DEFECTS DISCOVERED OR SUSPECTED 6. HAS KNOWLEDGE OF COMMUNITY RESOURCES AVAILABLE 7. ACTS AS AN INTERPRETER OF SPECIAL PHYSICAL NEEDS IN THE HOME AS WELL AS TO THE TEACHER AND SCHOOL ADMINISTRATOR 8. HAS A THOROUGH KNOWLEDGE OF SCHOOL POLICIES AND THE ABILITY TO INTERPRET AND USE SIGNIFICANT	A HIGH SCHOOL DIPLOMA IS REQUIRED FOR ACCEPTANCE INTO A PROGRAM LEADING TO THE GOAL OF REGISTERED NURSE. R.N.B.S. IS AWARDED AFTER FOUR YEARS OF STUDY IN THE COMBINED SETTINGS OF HOSPITAL AND COLLEGE, AND THE PASSING OF STATE BOARD EXAMINATIONS. R.N. WITH A DIPLOMA IN NURSING.

	DUTIES	TRAINING OR REQUIREMENTS
LEVEL 3 COMMUNITY HEALTH NURSE (CONTINUED)	SOCIAL, LEGAL, AND HEALTH DATA 9. IS AVAILABLE FOR FIRST AID, SUDDEN ILLNESS, AND OTHER EMERGENCIES 10. HAS KNOWLEDGE OF COMMUNICABLE DISEASES AND THEIR CONTROL AND PREVENTION 11. HAS AWARENESS OF SANITATION AND SAFETY MEASURES NECESSARY IN A PUBLIC BUILDING 12. SERVES AS COUNSELOR TO CHILDREN IN TEACHING OR EXPLAINING HEALTH NEEDS 13. ASSISTS MEDICAL DOCTOR IN PREPARING FOR AND CONDUCTING HEALTH EXAMS AND IMMUNIZATION PROGRAMS 14. GAINS A GENERAL KNOWLEDGE OF THE SOCIOLOGICAL AND PHYSIOLOGICAL PROBLEMS OF THE STRATA OF CHILDREN IN THE BUILDING TO BEST ACHIEVE TEACHING MODES FOR NUTRITION, CLEANLINESS, RECREATIONS, ETC., IN OTHER WORDS, PROMOTING A BACKGROUND OF EDUCATION TO BE FULLY UTILIZED FOR THE BENEFIT OF THE CHILDREN 15. ACT AS LIASION BETWEEN HOME AND SCHOOL CONCERNING CHILDRENS HEALTH AND MEASURES FOR PREVENTING DISEASE AND PROMOTING HEALTH WITH A VIEW TO BRING ABOUT ADJUSTMENTS NECESSARY TO INSURE WHOLESOME LEARNING EXPERIENCES 16. ASSIST IN DISCOVERING CHILDREN WITH SPECIAL NEEDS AND ENCOURAGE DEVELOPMENT OF MODIFIED SCHOOL EXPERIENCES WHEN NECESSARY 17. ASSIST TEACHERS IN TEACHING OF FIRST AID AND ACCIDENT PREVENTION	

SOCIAL SERVICE AIDES

	DUTIES	TRAINING OR REQUIREMENTS
LEVEL I GENERAL SCHOOL AIDE MAINTENANCE AIDE		1. UNDERSTANDING OF CHILDREN 2. ABILITY TO COOPERATE WITH SCHOOL PERSONNEL 3. BRIEF ORIENTATION PERIOD IN HUMAN DEVELOPMENT, SOCIAL RELATIONS AND THE SCHOOL'S GOALS AND PROCEDURES
LEVEL II COMMUNITY AIDE	1. HOME-SCHOOL RELATIONS 2. GO-BETWEEN: PRINCIPAL-TEACHER AND HOME. IN CASES INVOLVING ILLNESS, TRUANCY, ABSENTEEISM, FIGHTING, DISCIPLINE, ETC. COMMUNICATES SCHOOL POINT OF VIEW TO HOME AND HOME'S TO SCHOOL. 3. HELPS INVOLVE THE COMMUNITY IN SCHOOL PROGRAMS. 4. REFERS PROBLEMS TO APPROPRIATE SCHOOL PERSONNEL OR INTAKE WORKER. 5. SERVES AS AN INTERPRETER.	1. KNOWLEDGE OF THE SCHOOL PROGRAM 2. ABILITY TO MEET PEOPLE AND INSTILL CONFIDENCE 3. GENUINE CONCERN FOR COMMUNITY BETTERMENT PHYSICALLY AND SOCIALLY 4. KNOWLEDGE OF SOURCE OF PROBLEMS AND CAUSES OF MISUNDERSTANDINGS 5. KNOWLEDGE OF LANGUAGE
LEVEL III COMMUNITY SPECIALIST	1. CONTINUATION OF LEVEL II BUT MORE SOPHISTICATED 2. PROVIDE SERVICE TO FAMILIES AND INDIVIDUALS AT THE REQUEST OF ANY COOPERATING AGENCY. FOR EXAMPLE, EMERGENCY ACQUISITION OF FOOD, CLOTHING, OR SHELTER THROUGH APPROPRIATE AGENCIES	1. SAME AS LEVEL II 2. KNOWLEDGE OF AND WORKING RELATIONSHIP WITH EXISTING COMMUNITY AGENCIES 3. IN-SERVICE INSTRUCTION ON FAMILY AND PERSONAL PROBLEMS.
SOCIAL AND RECREATION SPECIALIST	WORKING WITH INDIVIDUALS AND GROUPS IN SCHOOL AND NEIGHBORHOOD: A) INVOLVING RECREATION AGENCIES; B) HELPING SCHOOL PERSONNEL WITH PHYSICAL EDUCATION, RECREATION, AND CRAFT PROGRAMS IN SCHOOL;	1. SAME AS LEVEL II 2. IN-SERVICE TRAINING IN GROUP WORK AND CONTENT SPECIALIZATION 3. GENERAL KNOWLEDGE OF PUBLIC AND PRIVATE AGENCIES

	DUTIES	TRAINING OR REQUIREMENTS
LEVEL III (CONTINUED)	C) ORGANIZING SUCH PROGRAMS AFTER SCHOOL	
TUTOR	WORK ON ONE-TO-ONE OR SMALL GROUP BASIS WITH UNDER-ACHIEVING CHILDREN. SOME CONTACT WITH FAMILY ESSENTIAL BUT LIMITED.	1. KNOWLEDGE OF THE SCHOOL PROGRAM. 2. IN-SERVICE TRAINING IN HOW CHILDREN LEARN 3. DEMONSTRATE FRIENDLINESS AND PATIENCE WITH CHILDREN
LEVEL IV CASE AIDE	ON REFERRED CASES: TO WORK UP HISTORY IN DETAIL. CONTACTS FAMILY FOR INITIAL HISTORY, FAMILY STRUCTURE AND SOCIO-ECONOMIC STATUS.	1. HIGH SCHOOL DIPLOMA PLUS TWO YEARS 2. IN-SERVICE TRAINING ON THE MEANING AND PURPOSE IF HISTORIES AND RECORDING SUMMARIES 3. BACKGROUND IN AREAS SUCH AS SOCIOLOGY AND COMMUNITY PROBLEMS
JR. COUNSELOR	ASSIGNED LIMITED CASE LOAD UNDER CLOSE SUPERVISION	1. SAME AS LEVEL IV 2. BACHELOR'S DEGREE 3. BASIC THEORY IN GROWTH AND DEVELOPMENT 4. INTERVIEWING MECHANICS

Appendix C

Ten Teams A - K (not including I)

Four Teachers for each team of 100 children

Subscripts 1, 2, 3, 4 represent four subdivisions of children in each group of 100.

Art, music, and physical ed. taught by specialists.

Teacher planning time during physical ed.

Alternate daily schedule requires block of two weeks.

A-WEEK SCHEDULE

TIME	PER.	SUBJECT	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:30-9:00			PLANNING	PLANNING	PLANNING	PLANNING	PLANNING
9:00	1	PHYSICAL ED.	TEACHERS A,B PLANNING CHILDREN A,B	9:00 A,B PLANNING CHILDREN A,B	A,B PLANNING CHILDREN A,B	A,B PLANNING CHILDREN A,B	A,B PLANNING CHILDREN A,B
TO		ART	E1,2; G1,2	TO E3,4; G3,4	E1,2; G1,2	E3,4; G3,4	E1,2; G1,2
9:50		MUSIC	F3,4; H3,4	9:40 F1,2; H1,2	F3,4; H3,4	F1,2; H1,2	F3,4; H3,4
9:50	2	PHYSICAL ED.	TEACHERS C,D PLANNING CHILDREN C,D	9:40 C,D PLANNING CHILDREN C,D	C,D PLANNING CHILDREN C,D	C,D PLANNING CHILDREN C,D	C,D PLANNING CHILDREN C,D
TO		ART	E3,4; G3,4	TO E1,2; G1,2	E3,4; G3,4	E1,2; G1,2	E3,4; G3,4
10:40		MUSIC	F1,2; H1,2	10:20 F3,4; H3,4	F1,2; H1,2	F3,4; H3,4	F1,2; H1,2
10:40	3	PHYSICAL ED.	TEACHERS E,F PLANNING CHILDREN E,F	10:20 E,F PLANNING CHILDREN E,F	E,F PLANNING CHILDREN E,F	E,F PLANNING CHILDREN E,F	E,F PLANNING CHILDREN E,F
TO		ART	PLANNING J3,4 ART CHILDREN J1,2	TO PLANNING K3,4 CHILDREN K1,2	PLANNING J3,4 ART CHILDREN J1,2	PLANNING K3,4 ART CHILDREN K1,2	PLANNING J3,4 ART CHILDREN J1,2
11:30		MUSIC	PLANNING K3,4 MUSIC CHILDREN K1,2	11:00 PLANNING J3,4 CHILDREN J1,2	PLANNING K3,4 MUSIC CHILDREN K1,2	PLANNING J3,4 MUSIC CHILDREN J1,2	PLANNING K3,4 MUSIC CHILDREN K1,2
11:30-12:30		LUNCH	LUNCH	11:00 PLANNING G,H PE CHILDREN G,H PE	LUNCH	LUNCH	LUNCH
12:30	4	PHYSICAL ED.	TEACHERS G,H PLANNING CHILDREN G,H	PLANNING K1,2 ART	G,H PLANNING CHILDREN G,H	G,H PLANNING CHILDREN G,H	G,H PLANNING CHILDREN G,H
TO		ART	PLANNING J1,2 ART CHILDREN J3,4	TO CHILDREN K3,4 ART 11:40 PLANNING J1,2 MU CHILDREN J3,4 MU	PLANNING J1,2 ART CHILDREN J3,4	PLANNING K1,2 ART CHILDREN K3,4	PLANNING J1,2 ART CHILDREN J3,4
1:35		MUSIC	PLANNING K1,2 MUSIC CHILDREN K3,4	11:40 - 12:40 LH	PLANNING K1,2 MUSIC CHILDREN K3,4	PLANNING J1,2 MUSIC CHILDREN J3,4	PLANNING K1,2 MUSIC CHILDREN K3,4
1:35	5	PHYSICAL ED.	PLANNING PE TEAM	12:40 PLANNING PE TEAM	PLANNING PE TEAM	PLANNING PE TEAM	PLANNING PE TEAM
TO		ART	A1,2; C1,2	TO B3,4; D3,4	A1,2; C1,2	B3,4; D3,4	A1,2; C1,2
2:25		MUSIC	B3,4; D3,4	1:35 A1,2; C1,2	B3,4; D3,4	A1,2; C1,2	B3,4; D3,4
2:25	6	PHYSICAL ED.	TEACHERS J,K PLANNING CHILDREN J,K	1:35 J,K PLANNING CHILDREN J,K	J,K PLANNING CHILDREN J,K	J,K PLANNING CHILDREN J,K	J,K PLANNING CHILDREN J,K
TO		ART	A3,4; C3,4	TO B1,2; D1,2	A3,4; C3,4	B1,2; D1,2	A3,4; C3,4
3:15		MUSIC	B1,2; D1,2	2:30 A3,4; C3,4	B1,2; D1,2	A3,4; C3,4	B1,2; D1,2

TUESDAY 2:30-3:15: PARENT-TEACHER CONFERENCES
IN-SERVICE MEETINGS

IN-SERVICE MEETINGS

B-WEEK SCHEDULE

TIME	PER.	SUBJECT	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:30-9:00			PLANNING	PLANNING	PLANNING	PLANNING	PLANNING
9:00	1	PHYSICAL ED.	TEACHERS A,B PLANNING CHILDREN A,B	9:00 A,B PLANNING CHILDREN A,B	A,B PLANNING CHILDREN A,B	A,B PLANNING CHILDREN A,B	A,B PLANNING CHILDREN A,B
TO		ART	E3,4; G3,4	TO E1,2; G1,2	E3,4; G3,4	E1,2; G1,2	E3,4; G3,4
9:50		MUSIC	F1,2; H1,2	9:40 F3,4; G3,4	F1,2; H1,2	F3,4; H3,4	F1,2; H1,2
9:50	2	PHYSICAL ED.	TEACHERS C,D PLANNING CHILDREN C,D	9:40 C,D PLANNING CHILDREN C,D	C,D PLANNING CHILDREN C,D	C,D PLANNING CHILDREN C,D	C,D PLANNING CHILDREN C,D
TO		ART	E1,2; G1,2	TO E3,4; G3,4	E1,2; G1,2	E3,4; G3,4	E1,2; G1,2
10:40		MUSIC	F3,4; H3,4	10:20 F1,2; H1,2	F3,4; H3,4	F1,2; H1,2	F3,4; H3,4
10:40	3	PHYSICAL ED.	TEACHERS E,F PLANNING CHILDREN E,F	10:20 E,F PLANNING CHILDREN E,F	E,F PLANNING CHILDREN E,F	E,F PLANNING CHILDREN E,F	E,F PLANNING CHILDREN E,F
TO		ART	PLANNING K3,4 ART CHILDREN K1,2	TO PLANNING J3,4 CHILDREN J1,2	PLANNING K3,4 ART CHILDREN K1,2	PLANNING J3,4 ART CHILDREN J1,2	PLANNING K3,4 ART CHILDREN K1,2
11:30		MUSIC	PLANNING J3,4 MUSIC CHILDREN J1,2	11:00 PLANNING K3,4 CHILDREN K1,2	PLANNING J3,4 MUSIC CHILDREN J1,2	PLANNING K3,4 MUSIC CHILDREN K1,2	PLANNING J3,4 MUSIC CHILDREN 1,2
11:30-12:30		LUNCH	LUNCH	11:00 PLANNING G,H PE CHILDREN G,H PE	LUNCH	LUNCH	LUNCH
12:30	4	PHYSICAL ED.	TEACHERS G,H PLANNING CHILDREN G,H	TO PLANNING J1,2 ART CHILDREN J1,2 ART	G,H PLANNING CHILDREN G,H	G,H PLANNING CHILDREN G,H	G,H PLANNING CHILDREN G,H
TO		ART	PLANNING K1,2 ART CHILDREN K3,4	11:40 PLANNING K1,2 MU CHILDREN K3,4 MU	PLANNING K1,2 ART CHILDREN K3,4	PLANNING J1,2 ART CHILDREN J3,4	PLANNING K1,2 ART CHILDREN K3,4
1:35		MUSIC	PLANNING J1,2 MUSIC CHILDREN J3,4	11:40-12:40 LUNCH	PLANNING J1,2 MUSIC CHILDREN J3,4	PLANNING K1,2 MUSIC CHILDREN K3,4	PLANNING J1,2 MUSIC CHILDREN J3,4
1:35	5	PHYSICAL ED.	PLANNING PE TEAM	12:40 PLANNING PE TEAM	PLANNING PE TEAM	PLANNING PE TEAM	PLANNING PE TEAM
TO		ART	B3,4; D3,4	TO A12; C1,2	B3,4; D3,4	A1,2; C1,2	B3,4; D3,4
2:25		MUSIC	A1,2; C1,2	1:35 B3,4; D3,4	A1,2; C1,2	B3,4; D3,4	A1,2; C1,2
2:25	6	PHYSICAL ED.	TEACHERS J,K PLANNING CHILDREN J,K	1:35 J,K PLANNING CHILDREN J,K	J,K PLANNING CHILDREN J,K	J,K PLANNING CHILDREN J,K	J,K PLANNING CHILDREN J,K
TO		ART	B1,2; D1,2	TO A3,4; C3,4	B1,2; D1,2	A3,4; C3,4	B1,2; D1,2
3:15		MUSIC	A3,4; C3,4	2:30 B1,2; D1,2	A3,4; C3,4	B1,2; D1,2	A3,4; C3,4

TUESDAY 2:30-3:15; PARENT-TEACHER CONFERENCES
IN-SERVICE MEETINGS

GROUPS A & B

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00 TO 9:50	PHYSICAL EDUCATION FOR GROUPS A & B A & B TEAMS TEACHER PLANNING PERIOD				
9:50 TO 10:40					
10:40 TO 11:30					
11:30-12:30					
12:30 TO 1:35					
1:35 TO 2:25	A1 & A2 - ART B3 & B4 - MUSIC A3 & A4 - READING B1 & B2 - READING	A1 & A2 - MUSIC A3 & A4 - READING B1 & B2 - READING B3 & B4 - ART	A1 & A2 - ART A3 & A4 - READING B1 & B2 - READING B3 & B4 - MUSIC	A1 & A2 - MUSIC A3 & A4 - READING B1 & B2 - READING B3 & B4 - ART	A1 & A2 - ART A3 & A4 - READING B1 & B2 - READING B3 & B4 - MUSIC
2:25 TO 3:15	A3 & A4 - ART A1 & A2 - READING B1 & B2 - MUSIC B3 & B4 - READING	A1 & A2 - READING A3 & A4 - MUSIC B1 & B2 - ART B3 & B4 - READING	A1 & A2 - READING A3 & A4 - ART B1 & B2 - MUSIC B3 & B4 - READING	A1 & A2 - READING A3 & A4 - MUSIC B1 & B2 - ART B3 & B4 - READING	A1 &A2 - READING A3 & A4 - ART B1 & B2 - MUSIC B3 & B4 - READING

GROUPS C & D

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00 TO 9:50					
9:50 TO 10:40	PHYSICAL EDUCATION FOR GROUPS C & D C & D TEAMS TEACHER PLANNING PERIOD				
10:40 TO 11:30					
11:30-12:30					
12:30 TO 1:35					
1:35 TO 2:25	C1 & C2 - ART C3 & C4 - READING D1 & D2 - READING D3 & D4 - MUSIC	C2 & C2 - MUSIC C3 & C4 - READING D1 & D2 - READING D3 & D4 - ART	C1 & C2 - ART C3 & C4 - READING D1 & D2 - READING D3 & D4 - MUSIC	C1 & C2 - MUSIC C3 & C4 - READING D1 & D2 - READING D3 & D4 - ART	C1 & C2 - ART C3 & C4 - READING D1 & D2 - READING D3 & D4 - MUSIC
2:25 TO 3:15	C1 & C2 - READING C3 & C4 - ART D1 & D2 - MUSIC D3 & D4 - READING	C1 & C2 - READING C3 & C4 - MUSIC D1 & D2 - ART D3 & D4 - READING	C1 & C2 - READING C3 & C4 - ART D1 & D2 - MUSIC D3 & D4 - READING	C1 & C2 - READING C3 & C4 - MUSIC D1 & D2 - ART D3 & D4 - READING	C1 & C2 - READING C3 & C4 - ART D1 & D2 - MUSIC D3 & D4 - READING

GROUPS E & F

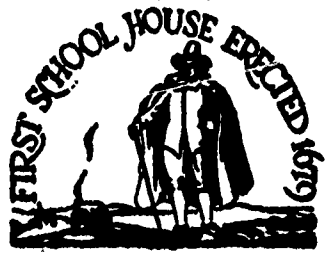
TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00 TO 9:50	E1 & E2 - ART E3 & E4 - READING F1 & F2 - READING F3 & F4 - MUSIC	E1 & E2 - READING E3 & E4 - ART F1 & F2 - MUSIC F3 & F4 - READING	E1 & E2 - ART E3 & E4 - READING F1 & F2 - READING F3 & F4 - MUSIC	E1 & E2 - READING E3 & E4 - ART F1 & F2 - MUSIC F3 & F4 - READING	E1 & E2 - ART E3 & E4 - READING F1 & F2 - READING F3 & F4 - MUSIC
9:50 TO 10:40	E1 & E2 - READING E3 & E4 - ART F1 & F2 - MUSIC F3 & F4 - READING	E2 & E2 - ART E3 & E4 - READING F1 & F2 - READING F3 & F4 - MUSIC	E1 & E2 - READING E3 & E4 - ART F1 & F2 - MUSIC F3 & F4 - READING	E1 & E2 - ART E3 & E4 - READING F1 & F2 - READING F3 & F4 - MUSIC	E1 & E2 - READING E3 & E4 - ART F1 & F2 - MUSIC F3 & F4 - READING
10:40 TO 11:30	PHYSICAL EDUCATION FOR GROUPS E & F E & F TEAMS TEACHER PLANNING PERIOD				
11:30-12:30					
12:30 TO 1:35					
1:35 TO 2:25					
2:25 TO 3:15					

GROUPS G & H

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00 TO 9:50	G1 & G2 - ART G3 & G4 - READING H1 & H2 - READING H3 & H4 - MUSIC	G1 & G2 - READING G3 & G4 - ART H1 & H2 - MUSIC H3 & H4 - READING	G1 & G2 - ART G3 & G4 - READING H1 & H2 - READING H3 & H4 - MUSIC	G1 & G2 - READING G3 & G4 - ART H1 & H2 - MUSIC H3 & H4 - READING	G1 & G2 - ART G3 & G4 - READING H1 & H2 - READING H3 & H4 - MUSIC
9:50 TO 10:40	G1 & G2 - READING G3 & G4 - ART H1 & H2 - MUSIC H3 & H4 - READING	G1 & G2 - ART G3 & G4 - READING H1 & H2 - READING H3 & H4 - MUSIC	G1 & G2 - READING G3 & G4 - ART H1 & H2 - MUSIC H3 & H4 - READING	G1 & G2 - ART G3 & G4 - READING H1 & H2 - READING H3 & H4 - MUSIC	G1 & G2 - READING G3 & G4 - ART H1 & H2 - MUSIC H3 & H4 - READING
10:40 TO 11:30					
11:30-12:30					
12:30 TO 1:35	PHYSICAL EDUCATION FOR GROUPS G & H G & H TEAMS TEACHER PLANNING PERIOD				
1:35 TO 2:25					
2:25 TO 3:15					

GROUPS J & K

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00 TO 9:50					
9:50 TO 10:40					
10:40 TO 11:30	J1 & J2 - ART J3 & J4 - READING K1 & K2 - MUSIC K3 & K4 - READING	J1 & J2 - MUSIC J3 & J4 - READING K1 & K2 - ART K3 & K4 - READING	J1 & J2 - ART J3 & J4 - READING K1 & K2 - MUSIC K3 & K4 - READING	J1 & J2 - MUSIC J3 & J4 - READING K1 & K2 - ART K3 & K4 - READING	J1 & J2 - ART J3 & J4 - READING K1 & K2 - MUSIC K3 & K4 - READING
11:30-12:30					
12:30 TO 1:35	J1 & J2 - READING J3 & J4 - ART K1 & K2 - READING K3 & K4 - MUSIC	J1 & J2 - READING J3 & J4 - MUSIC K1 & K2 - READING K3 & K4 - ART	J1 & J2 - READING J3 & J4 - ART K1 & K2 - READING K3 & K4 - MUSIC	J1 & J2 - READING J3 & J4 - MUSIC K1 & K2 - READING K3 & K4 - ART	J1 & J2 - READING J3 & J4 - ART K1 & K2 - READING K3 & K4 - MUSIC
1:35 TO 2:25					
2:25 TO 3:15	PHYSICAL EDUCATION FOR GROUPS J & K J & K TEAMS TEACHER PLANNING PERIOD				



THE PUBLIC SCHOOLS OF SPRINGFIELD, MASSACHUSETTS