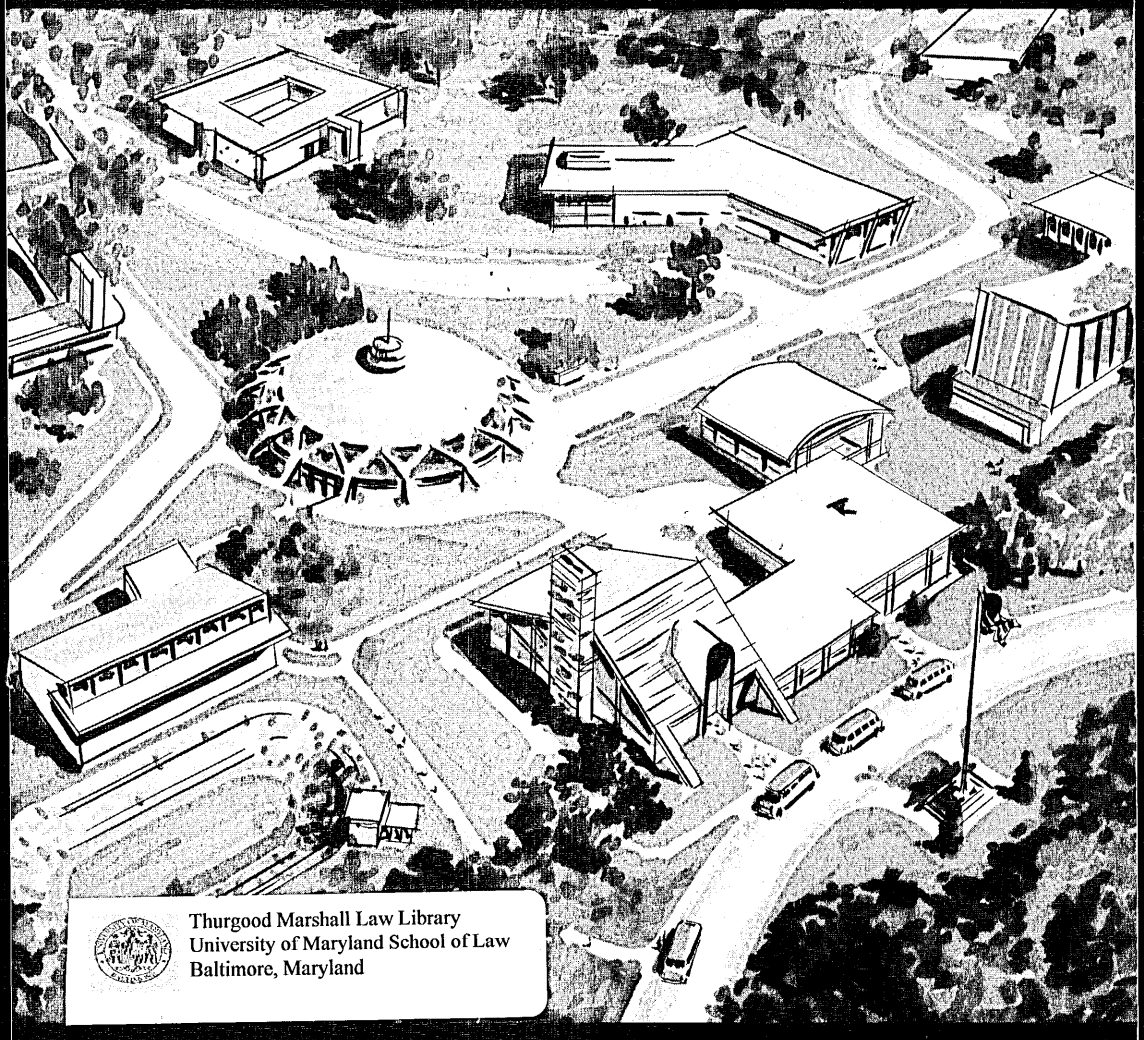
EDUCATION PARKS

Appraisals of plans to improve educational quality and desegregate the schools



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- Study and collect information concerning legal developments constituting a denial of equal protection of the laws under the Constitution;
- Appraise Federal laws and policies with respect to equal protection of the laws;
- Serve as a national clearinghouse for information in respect to denials of equal protection of the laws; and
- Submit reports, findings, and recommendations to the President and the Congress.

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APPRAISALS OF PLANS TO IMPROVE EDUCATIONAL QUALITY AND DESEGREGATE THE SCHOOLS

UNITED STATES
COMMISSION ON CIVIL RIGHTS

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OCTOBER 1967

PREFACE

In February 1967, the U.S. Commission on Civil Rights published *Racial Isolation in the Public Schools,* a study undertaken at the request of President Johnson. In its report to the President and the Congress the Commission made a number of basic findings of fact. Among the chief findings were these:

- Racial isolation in the schools, whatever its cause, seriously impairs the academic achievement of Negro students; it also damages the attitudes of both Negro and white students;
- Racial isolation in the Nation's schools is intense, and rapidly is growing worse;
- Programs of compensatory and remedial education conducted in racially isolated schools seem unlikely—as presently constituted—to remedy the educational harm arising from racial isolation;
- Desegregation has been undertaken in a number of smaller and medium sized cities, and school officials there report that it has been educationally effective; the quality of education has been maintained or improved, and white as well as Negro students have benefited.

In the Nation's older and larger metropolitan areas, where racial concentrations are most extensive, the barriers to desegregation are more difficult to overcome. A major portion of the study was devoted to an analysis of remedies for racial isolation, and as part of this analysis, efforts toward desegregation in these larger cities were evaluated. Since there has not been great progress in these cities, this aspect of the study was devoted in large part to an analysis and evaluation of proposals for desegregation which now are in the planning stage, or under study. The Commission found that the proposals which have been advanced most often and which are receiving most careful scrutiny are those for education parks. Plans are underway, or at various stages of development in a number of cities, among them: Pittsburgh, Pa.; Syracuse and New York, N.Y.; East Orange, N.J.; Philadelphia, Pa.; Baltimore, Md.; Berkeley and Sausalito, Calif.

Although the plans and proposals for education parks vary in detail, all have certain basic common elements. All of them embody the

idea that the creation of new larger schools will permit an expansion of attendance areas to facilitate desegregation and at the same time permit the consolidation of school resources and facilities. Thus it is suggested that the education parks will permit substantial improvements in the quality of education for all children. The education park has been compared to school consolidation in rural areas, where small, widely scattered school populations were housed at one central point to make better quality education possible. Discussing the education park concept, James E. Mauch, specialist in urban school system planning for the U.S. Office of Education, has written: "Just as the consolidated rural school could offer educational opportunities unmatched by the small schools it replaced, the education park in the city could offer chances to city youngsters which are unavailable in their neighborhood schools."

In some cases the parks are proposed for one grade level, such as the secondary schools, for one section of a city, for an entire city, or for a metropolitan area. But all plans for the education parks envision a group of school facilities to serve at least 1,500 to 2,000 students, and some propose substantially larger enrollments. Plans for these new schools also incorporate the establishment of special core facilities, to house resources and programs presently diffused—if they exist at all—in existing smaller schools. Thus plans for education parks contemplate a cluster of small school buildings around a central facility, with the central unit housing special services and facilities, such as counseling center, libraries, lecture halls, remedial reading clinics, and science laboratories. Many plans also envision the installation of core facilities presently too expensive to install in each existing small school, such as closed circuit television, computer-based instructional units, comprehensive health facilities, and university-linked research and development centers. Educators report that the Nova School, an education park in Fort Lauderdale, Fla., has provided substantial improvements in the quality of education.

Educators and students of education who are developing plans for education parks believe that they hold much promise. This conviction, however, must be considered in the light of the problems which such larger consolidated schools may pose. Therefore, in assessing the potential which education parks seem to hold for solving many of the problems of urban education, the Commission sought the advice of experienced educators on a number of questions. Would such larger schools reduce or increase the attention which teachers could give to the individual needs and abilities of students? Would their size foster an atmosphere of impersonality which could frustrate

teachers' ability to communicate with their pupils, and with each other? Would they encourage or discourage parents' participation? Would they facilitate the development and use of new educational technologies, such as computer-based instructional programs? Would they facilitate or impede the development of classroom grouping systems designed to promote integration and attention to students' individual needs? Would transportation be feasible in the larger metropolitan regions?

The papers included in this volume represent one aspect of the Commission's effort to answer these questions, and to evaluate the potentialities and limitations of the education parks. Although the papers do not offer *all* the answers to the questions just posed, they were very helpful in the Commission's investigation. On the basis of these papers and other investigations the Commission concluded that the education parks represent a promising desegregation remedy, which also may improve the quality of education for all children.

In his letter to the Commission requesting the study, President Johnson expressed the hope that the Commission's findings "may provide a basis for action not only by the Federal Government but also by the States and local school boards which bear the direct responsibility for assuring quality education."

The Commission is reprinting these papers in the hope that they will lead to a greater knowledge of the facts, and therefore would be useful to educators and concerned citizens in their search for methods to provide equal educational opportunity.

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The School Park

(This paper was prepared for the Commission by John H. Fischer, President, Teachers College, Columbia University.)

Of all the plans that have been put forward for integrating urban schools the boldest is the school park. This is a scheme under which several thousand ghetto children and a larger number from middle-class white neighborhoods would be assembled in a group of schools sharing a single campus. Placing two or more schools on one site is not a new idea, but two other aspects of the school park are novel. It would be the largest educational institution ever established below the collegiate level and the first planned explicitly to cultivate racial integration as an element of good education.

A small community might house its entire school system in one such complex. A large city with one or more large ghettos would require several. In the most imaginative and difficult form of the proposal a central city and its neighboring suburban districts would jointly sponsor a ring of metropolitan school parks on the periphery of the city.[1]

The characteristic features of the school park—comprehensive coverage and unprecedented size—are its main advantages and at the same time the chief targets of its critics. Is the park a defensible modern version of the common school, perhaps the only form in which that traditionally American institution can be maintained in an urban society? Or is it a monstrous device that can lead only to the mass mistreatment of children? Whatever else it is or may in time turn out to be, it is neither a modest proposal nor a panacea.

Since even one such project would require a substantial commitment of policy and money, it is obvious that the validity of the concept should be closely examined and the costs and potential benefits associated with it carefully appraised.

[1] Thomas B. Pettigrew, "School Desegregation in Urban America," unpublished paper prepared for NAACP Legal Conference on School Desegregation, October 1966, pp. 25–33.

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The purpose of this paper is to assist that process by considering the relevance of the school park to present problems in urban education and by analyzing, although in a necessarily limited way, its potentiality.

The Problem

Twelve years of effort, some ingeniously pro forma and some laboriously genuine, have proved that desegregating schools—to say nothing of integrating them—is much more difficult than it first appeared. Attendance area boundaries have been redrawn; new schools have been built in border areas; parents have been permitted, even encouraged, to choose more desirable schools for their children; pupils from crowded slum schools have been bused to outlying schools; Negro and white schools have been paired and their student bodies merged; but in few cases have the results been wholly satisfactory. Despite some initial success and a few stable solutions, the consequences, for the most part, have proved disappointing. Steady increases in urban Negro population, continuing shifts in the racial character of neighborhoods, actual or supposed decline in student achievement, unhappiness over cultural differences and unpleasant personal relations have combined to produce new problems faster than old ones could be solved.[2]

Underlying the whole situation are basic facts that have too seldom been given the attention they merit. Some of these facts bear on the behavior of individuals. Few parents of either race, for example, are willing to accept inconvenience or to make new adjustments in family routines if the only discernible result is to improve the opportunities of other people's children. A still smaller minority will actually forego advantages to which their children have become accustomed merely to benefit other children. Most parents, liberal or conservative, hesitate to accept any substantial change in school procedures unless they are convinced that their own children will have a better than even chance of profiting from them. While prejudice and bigotry are not to be minimized as obstacles to racial integration, resistance attributed to them is often due rather to the reluctance of parents to risk a reduction in their own children's opportunities.

Nor, in some cases, have community characteristics and population movement been well enough considered. The steady and continuing

[2] Jeanette Hopkins, "Self Portrait of School Desegregation in Northern Cities," unpublished paper prepared for NAACP Legal Conference on School Desegregation, October 1966, pp. 1–3.

expansion of ghettos is clearly evident in almost every central city, yet one desegregation plan after another proposes to build new schools on the obviously temporary borders between white and Negro communities or to pair adjacent existing schools in the vain hope of retaining well-balanced student bodies. Even the most superficial glance at occupancy patterns would reveal that only massive changes in housing, migration, or birth rates could possibly prevent early resegregation of the schools involved.

The controversy over what constitutes viable racial balance in schools or neighborhoods remains unsettled, for the data are far from complete. There is abundant evidence, however, that few middle-class families, Negro or white, will choose schools enrolling a majority of Negro children if any alternative is available. Additional complications arise from social class and cultural relationships. Although borderline sites or school pairing on the periphery of a ghetto may produce temporary racial desegregation, these devices rarely bring together children of different social classes. As a consequence, the predictable antagonisms between lower class white and Negro groups increase the school's burden of adjustment problems and diminish the benefits of cultural interchange.

If the main shortcoming of these efforts were that they produced temporary rather than permanent solutions, the consequences would at least be tolerable. The first short-term program might give way to another, even if it, too, proved to be of only passing usefulness. But these failures not only retard progress; they undermine it. Each time a desegregated school becomes resegregated, the ensuing disappointment and bitterness exacerbate the original condition. Whatever the cause of the reversion, the fact of failure is clear. The discouraging sense that desegregation "won't work" leads to the conclusion that the ghetto child's only hope lies in improving his segregated school. For the immediate future this may, indeed, be the only course open in some situations. But for the long run, neither school management nor public policy can be based on any assumption so completely contrary to the principles of an open society.

The moral and legal grounds for desegregating schools are clear and well established. The factual evidence that integration can improve the effectiveness of education is steadily accumulating.[3] For the pur-

[3] James S. Coleman, "Equality of Educational Opportunity," Washington, D.C.: U.S. Department of Health, Education, and Welfare, p. 332.

poses of this paper there is no need to review either. But it will be useful to examine what is now known about the conditions that must be met if schools are to be well integrated and effective.

The first requirement is that the proportion of each race in the school be acceptable and educationally beneficial to both groups.[4] This means that the proportion of white students must be high enough to keep them and, more importantly, their parents from feeling overwhelmed and to assure the Negro student the advantage of a genuinely integrated environment. On the other hand, the number of Negro students must be large enough to prevent their becoming an odd and isolated minority in a nominally desegregated school. Their percentage should enable them to appear as a matter of course in all phases of school life. No Negro student should have to "represent his race" in any different sense than his white classmates represent theirs.

Many efforts have been made to define a racially balanced school, but no "balance," however logical it may be statistically, is likely to remain stable and workable if it results in either a majority of Negroes, or so few that they are individually conspicuous. This suggests in practice a Negro component ranging from a minimum of 15 to 20 percent to a maximum of 40 to 45 percent.

School districts with small Negro minorities, even though they may be concentrated in ghettos, can ordinarily devise plans to meet these conditions without large scale changes in the character of their school systems. Central cities with sizable ghettos and smaller cities with larger proportions of Negroes will usually be required to make substantial changes in order to attain integrated schools.

But even when such acceptable racial proportions have been established, an effectively integrated school can be maintained only if a second condition is met: The school must respond to the educational needs of all its students better than the schools they might otherwise attend. The school must possess the capacity, the physical facilities, the staff strength, the leadership, and the flexibility required not only to offer a wide range of programs and services, but also adapt them to the special circumstances of individual students.

The Park as a Possible Solution

In school districts where redistricting, pairing, open enrollment, and busing offer little hope of producing lasting integration and high qual-

[4] Pettigrew, op cit., p. 17.

ity school programs, the school park may well offer a satisfactory solution. School parks (called also education parks, plazas, or centers) have been proposed in a number of communities and are being planned in several. The schemes so far advanced fall into several categories. The simplest, which is appropriate for a small or medium-sized town, assembles on a single campus all the schools and all the students of an entire community. As a result the racial character of a particular neighborhood no longer determines the character of any one school. All the children of the community come to the central campus where they can be assigned to schools and classes according to whatever criteria will produce the greatest educational benefits. The School Board of East Orange, N.J., has recently announced a 15-year construction program to consolidate its school system of some 10,000 pupils in such an educational plaza.[5]

Another variant of the park is a similarly comprehensive organization serving one section of a large city as the single park might serve an entire smaller town. Where this plan is adopted the capacity of the park must be so calculated that its attendance area will be sufficiently large and diversified to yield a racially balanced student body for the foreseeable future. Merely to assemble two or three elementary units, a junior high school and a senior high school would in many cities produce no more integration than constructing the same buildings on the customary separate sites.

Less comprehensive schemes can also be called school parks. One, applicable to smaller communities, would center all school facilities for a single level of education—e.g., all elementary schools, or middle schools, or high schools, on a single site. Single-level complexes serving less than a whole community are also possible in large cities. The 1964 Allen Report for New York City proposed middle school parks to enroll 15,000 pupils each and to be located where they would assure as many children as possible experience in well-integrated schools.[6]

In its 1966 study of the Pittsburgh schools, the Harvard Graduate School of Education proposed that all high school programs be housed

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[5] "Desegregation. Ten Blueprints for Action," *School Management,* vol. 10, No. 10, October 1966, pp. 103–105.

[6] State Education Commission's Advisory Committee on Human Relations and Community Tensions, "Desegregating the Public Schools of New York City," 1964, New York State Department of Education, p. 18.

in five new education centers, each to be located where it will serve a racially balanced student body for the foreseeable future.[7]

A fourth, and the most comprehensive, type of park would require a number of changes in school planning and administration. This is the metropolitan school park designed to meet the increasingly serious problems posed by the growing Negro population of the central cities and the almost wholly white suburbs that surround them. The proposal, briefly stated, is to ring the city with school parks that would enroll the full range of pupils from the kindergarten to the high school and possibly including a community college. Each park would be placed in a "neutral" area near the periphery of the city. Each attendance area would approximate a segment of the metropolitan circle with its apex at the center of the city and its base in the suburbs. Since many students would arrive by school bus or public carrier, each site would be adjacent to a main transport route.[8]

The potentialities of school parks in general can be explored by projecting what might be done in such a metropolitan center. We can begin with certain assumptions about size and character. In order to encompass an attendance area large enough to assure for the long term an enrollment more than 50 percent white and still include a significant number of Negro students from the inner-city ghetto, the typical park, in most metropolitan areas, would require a total student body (kindergarten to Grade 12) of not less than 15,000. It would thus provide all the school facilities for a part of the metropolitan area with a total population of 80,000 to 120,000. The exact optimum size of a particular park might be as high as 30,000, depending upon the density of urban and suburban population, the prevalence of nonpublic schools, the pattern of industrial, business, and residential zoning, the character of the housing, and the availability of transport.

The site, ideally, would consist of 50 to 100 acres but a workable park could be designed on a much smaller area or, under suitable circumstances, deep within the central city by using high-rise structures.[9] Within these buildings individual school units of varying sizes would be dispensed horizontally and vertically. On a more generous plot each

[7] Center for Field Studies, Harvard Graduate School of Education; "Education for Pittsburgh," Cambridge, 1966, p. 25.

[8] Pettigrew, op. cit., pp. 25–33.

[9] Harold B. Gores, "Education Park; Physical and Fiscal Aspects," in Milton Jacobson (Ed) *An Exploration of the Educational Park Concept,* New York, New York Board of Education, 1964, pp. 2–7.

unit could be housed separately, with suitable provision for communication through tunnels or covered passages.

The sheer size of the establishment would present obvious opportunities to economize through centralized functions and facilities, but the hazards of over-centralization are formidable. To proceed too quickly or too far down that path would be to sacrifice many of the park's most valuable opportunities for better education.

Because of its size the park would make possible degrees of specialization, concentration, and flexibility that are obtainable only at exorbitant cost in smaller schools. A center enrolling 16,000 students in a kindergarten—4-4-4 organization, with 1,000–1,300 pupils at each grade level, could efficiently support and staff not only a wide variety of programs for children at every ordinary level of ability, but also highly specialized offerings for those with unusual talents or handicaps.

Superior libraries could be maintained, with strong centralized and decentralized collections of books, tapes, discs, films, and a rich combination of services for every unit in the park.

Such an institution could operate its own closed circuit television system more effectively, and with lower cable costs than a community-wide system, and with greater attention to the individual teacher's requirements. A central bank of films and tapes could be available for transmission to any classroom, and the whole system controlled by a dialing mechanism that would enable every teacher to "order" at any time whatever item he wished his class to see. Other forms of information storage and retrieval could readily be provided for instruction, administration, or teacher education.

The pupil population would be large enough to justify full-time staffs of specialists and the necessary physical facilities to furnish medical, psychological, and counseling services at a level of quality that is now rarely possible. Food service could be provided through central kitchens, short distance delivery, and decentralized dining rooms for the separate schools.

The most important educational consequences of the park's unprecedented size would be the real opportunities it would offer for organizing teachers, auxiliary staff, and students. In the hypothetical K—4-4-4 park of 16,000, for example, there would be about 5,000 pupils each in the primary and middle school age groups, or enough at each level for 10 separate schools of 500 pupils.

Each primary or middle school of that size could be housed in its

own building, or its own section of a larger structure with its own faculty of perhaps 25. Such a unit, directed by its own principal, with its own complement of master teachers, "regular" teachers, interns, assistants, and volunteers, would be the school "home" of each of its pupils for the 3, 4, or 5 years he would spend in it before moving on to the next level of the park. A permanent organization of children and adults of that size employing flexible grouping procedures would make possible working relationships far superior to those now found in most schools. Moreover, since a child whose family moved from one home to another within the large area served by the park would not be required to change schools, one of the principal present handicaps to effective learning in city schools would be largely eliminated.

While not every school within the park could offer every specialized curriculum or service, such facilities could be provided in as many units as necessary and children assigned to them temporarily or permanently. Each child and each teacher would "belong" to his own unit, but access to others would be readily possible at any time.

The presence on a single campus of all school levels and a wide range of administrative and auxiliary services would present the professional staff with opportunities for personal development and advancement which no single school now affords. The ease of communication, for example, among the guidance specialists or mathematics teachers would exceed anything now possible. It would become feasible to organize for each subject or professional specialty a department in which teachers in all parts of the park could hold membership, in much the way that a university department includes professors from a number of colleges.

For the first time, a field unit could justify its own research and development branch, a thing not only unheard of but almost unimaginable in most schools today. With such help "in residence" the faculty of the park could participate in studies of teaching problems and conduct experiments that now are wholly impracticable for even the most competent teachers.

Much would depend, of course, on the imagination with which the park was organized and administered and how its policies were formed. Since the metropolitan park, by definition, would serve both a central city and one or more suburban districts, its very establishment would be impossible without new forms of intergovernmental cooperation. At least two local school boards would have to share authority,

staffs, and funds. The State educational authority and perhaps the legislature would be required to sanction the scheme and might have to authorize it in advance. Public opinion and political interests would be deeply involved as would the industrial and real estate establishments of the sponsoring communities.

The planning of a metropolitan park would have to be viewed as a concern not merely of school people, parents, and legislative or executive officials. It would have to be approached from the outset as a fundamental problem in metropolitan planning. Its dependence on quantitative projections of population and housing data is obvious, but equally important is its relation to the character of the housing, occupancy policies, and ethnic concentrations. To build a park only to have it engulfed in a few years by an enlarged ghetto would be a sorry waste of both money and opportunity. No good purpose, educational or social, would be served by creating what might become a huge segregated school enclave. A school park can be undertaken responsibly only as part of a comprehensive metropolitan development plan. Where such planning is not feasible, the establishment of a metropolitan school park would be a questionable venture.

It may be reasonable in some circumstances to project a park within the limits of a single school district. Where the analysis of population trends and projected development justify a single district park, the intergovernmental problems disappear, but agreements within the municipal structure will still be important and may be quite difficult to negotiate. The need for comprehensive community planning to assure the future viability of the park is certainly no less necessary within the city than in the metropolitan area.

Once the park is authorized, the question of operating responsibility must be addressed. In a sense that no individual school or geographic subdivision possibly can, the school park permits decentralized policy development and administration. Because of the natural coherence of the park's components and their relative separation from the rest of the district—or districts—to which it is related, the park might very well be organized as a largely self-contained system. The argument for placing the park under a board with considerable autonomy is strong whether it is a metropolitan institution or a one-city enterprise. For the first time it could thus become possible for the citizens in a section of a larger community to have a direct, effective voice in the affairs of a school serving their area. Such details as the size of the

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board, length of terms, and method of selection would best be determined in each case according to local needs, but with full readiness to devise new statutes in order to take maximum advantage of the new opportunity.

Citizen participation would have to occur at points other than the board, however. If the park is to be strongly related to its communities, and integrated in fact as well as in principle, parents and other citizens would have to be involved, formally and informally, in many of its activities. These might range from parent-teacher conferences to service on major curriculum advisory groups. They could include routine volunteer chores and service as special consultants or part-time teachers. The specific possibilities are unlimted but the tone of the relationships will critically affect the park's success.

Because of its size, diversity, and compactness the park will present possibilities—and problems—in internal organization and administration that have not been encountered before. If the management of these new institutions only replicates the forms, procedures, and errors of present school bureaucracies the battle for a fresh approach to universal education could be lost before it began. Plans can and should be designed to make the most productive use of the central resources of the park as a whole while at the same time taking maximum advantage of the diversity among its component units. Any community or metropolitan area contemplating a park would do well not only to select its administrative and supervisory staff with great care but to assemble it a semester or even a full year before students are admitted in order to plan the working arrangements.

Obtaining the necessary cooperation to build a metropolitan park will not be easy but the financial problems will be equally severe. A park accommodating 16,000 pupils can be expected to cost in the neighborhood of $50 million. The financial pressures on cities and suburban districts make it clear that Federal support on a very large scale will be required if school parks are to be built. But it is precisely the possibility of Federal funding that could provide the incentive to bring the suburbs and the central city together.

While categorical support through Federal funds will continue to be needed, effective leverage on the massive problems of urban education, including, particularly, integration, can be obtained only through broadly focused programs of general aid, with special attention given to new construction. Little can be done toward equalizing oppor-

tunities without a sizable program of school building expansion and replacement. Such aid, moreover, must be available for both the neglected child and the relatively advantaged.

If much of this new assistance were expressly channeled into creating metropolitan parks, on a formula of 90 percent Federal and 10 percent State and local funding, it would envision equalized, integrated schools of high quality in most cities within a period of 10 to 15 years.

Would such a program mean abandoning usable existing school buildings? Not at all, since most school districts desperately need more space for their present and predictable enrollment, to say nothing of the other uses that school systems and other government agencies could readily find for buildings that might be relinquished. The impending expansion of nursery school programs and adult education are only two of the more obvious alternate uses for in-city structures.

Is the school park an all-or-nothing question? Is it necessary to abandon all existing programs before the benefits of the park can be tested? Short of full commitment, there are steps that can be taken in the direction of establishing parks and to achieve some of their values. The "educational complex" put forward in the Allen Report for New York City is one such step. As described in that report, the complex is a group of two to five primary schools and one or two middle schools near enough to each other to form a cooperating cluster and serving sufficiently diversified neighborhoods to promote good biracial contact.

> An educational complex should be administered by a *senior administrator,* who should be given authority and autonomy to develop a program which meets appropriate citywide standards but is also directly relevant to the needs of the locality. Primary schools within the complex should share among themselves facilities, faculties, and special staff, and should be coordinated to encourage frequent association among students and parents from the several units. Within the education complex teachers will be better able to help children from diverse ethnic backgrounds to become acquainted with one another. Parent-teacher and parent-school relations should be built on the bases of both the individual school and the complex, The children—and their parents—will thus gain the dual benefits of a school close to home and of membership in a larger, more diverse educational and social community. The concept of the educational complex arises in part from

the view that the means of education and much of their control should be centered locally.

> Although it may not be possible to desegregate all primary schools, ultimately most of them should be integrated educationally. This will aid the better preparation of students for life and study in the middle school; it will more nearly equalize resources; and it will give the staff in the primary schools new opportunities for innovation and originality in their work.[10]

Experimental projects on a limited scale might also be set up between city and suburban districts to deal with common problems. The Hartford and Irondequoit projects transporting Negro students to suburban schools are examples of what can be done.

Additional efforts could include exchanging staff members; involving students, particularly at the secondary level, in joint curricular or extracurricular activities; setting up "miniature school parks" during the summer in schools on the city-suburban border; conducting work sessions in which board and staff members from metropolitan school systems examine population changes, common curriculum problems, and opportunities for joint action.

Establishing school parks would mean a substantial shift in educational policy. In addition, as has been pointed out, the metropolitan park would require concerted action among governmental units. New forms of State and Federal financial support and sharply increased appropriations would be essential. In some cases teacher certification procedures would have to be altered and administrative routines adapted to tasks never before attempted. New forms of school architecture would have to be devised and more extensive transportation services instituted. In brief, a number of quite sweeping reforms would have to be accomplished. Parents and other citizens, school leaders, public officials and legislators will be justified in asking for persuasive factual and logical support for such radical proposals.

The response must be that critically important educational, social, and economic needs of a large part of urban America are not being met by our present policies and practices and that there is no reason to think that they will be met by minor adjustments of the present arrangements. The evidence is irresistible that the consequences of racial segregation are so costly and so damaging to all our people that they should no longer be tolerated. Through bitter experience we are

[10] State Education Commission's Advisory Committee, op. cit., p. 18.

learning that the isolation of any race is demeaning when it is deliberate and that it is counterproductive in human and economic terms, no matter how it is caused or explained. The elimination of this debilitating and degrading aspect of American life must now be ranked among the most important and urgent goals of our society. The task cannot be done without concerted action among many forces and agencies. Participation by private agencies and by government at every level will be needed. But central to every other effort will be the influence and the power of the public schools. Those schools, which have served the Nation so well in achieving other high purposes, can serve equally well in performing their part of this new undertaking—if the magnitude of the task is fully appreciated and action undertaken on a scale appropriate to a major national purpose.

The steps that have heretofore been taken to cope with segregation have been of no more than tactical dimensions. Most of them have been relatively minor adaptations and accommodations requiring minimal changes in the status quo. It should by now be clear that we cannot integrate our schools or assure all our children access to the best education unless we accept these twin goals as prime strategic objectives.

Responding to commitments of comparable significance at other stages in our history as a Nation, we built tens of thousands of common schools; spanned the Continent with a network of agricultural and mechanical colleges; devised systems of vocational education in every State; and, most recently, set in motion a spectacular expansion of scientific research and development.

Establishing rings of school parks about each of our segregated central cities would, to be sure, require decisions to invest large sums of money in these projects. The prior and more important commitment, however, must be to the purpose to which the money will be dedicated: effective equality of educational opportunity at a new high level for millions of our young people.

The school park is no panacea. In itself it will guarantee no more than a setting for new accomplishment. But the setting is essential. If we fail to provide it or to invent an equally promising alternative, we shall continue to deny a high proportion of our citizens the indispensable means to a decent and productive life.

Desegregating the Integrated School

(This paper was prepared for the Commission by John I. Goodlad, University of California at Los Angeles, and the Institute for Development of Educational Activities.)

I

Segregation is and has been the condition of America's schools. Segregation by race or religion is obvious and parallels poverty as the most visible social, political, and educational domestic issue of our time. It is the issue that makes or breaks today's big-city school superintendent. Nonetheless, the progress now being made toward integration of Negro, Caucasian and other boys and girls in our schools, halting and troubled though it may be, surpasses our most optimistic predictions of a decade ago.

But this integration of the races is taking place in a segregated school milieu. Most men and women over 40 recall a childhood schooling in which the sons and daughters of mill owners, shop proprietors, professional men, and day laborers attended side by side. School boundaries, reaching out into fields and hills to embrace the pupil population, transcended such socioeconomic clusterings as existed. Population growth and urbanization, accompanied by the flight to the suburbs, changed all that. A large proportion of the population lives today in ghettos. Race remains, indeed, a shameful criterion for separation. But the more subtle factors of class distinction separate Negro from Negro and Caucasian from Caucasian within the larger cloth of black and white demarcation.[11]

A plan designed initially to alleviate *de facto* racial segregation is designed also to alleviate some of our *de facto* socioeconomic class segregation. This is the "educational park." In brief, the educational park is a modern version of the community school, serving a wider range of functions and a longer day of more varied activities than characterize the conventional 9:00 to 3:00 school program. Ideally, it both caters to the cultural and recreational interests of entire families and dispatches its academic responsibilities to the school-age population.

[11] For one of the best analyses of this condition in print, see Bruno Bettelheim, "Segregation: New Style," *School Review*, 66 (Autumn 1958), 251–72.

Strategically located so as to cut across both racial and socioeconomic ghettos and former school boundaries, the educational park offers potentiality for the kind of population mix that uncontrolled progress appears to be rendering obsolete. Of course, to anticipate early attainment of a fully integrated educational milieu is to expect what is not likely to occur.

And to assume that a thorough mixing of racial, ethnic, religious, and socioeconomic groups in schools or educational parks will provide equal educational opportunity for all the children of all the people is to be deceived. Certain conceptions of school function, expectations for learners, and school practices—particularly placing and grading pupils—that have long characterized our formal educational enterprise segregate and stereotype boys and girls within otherwise integrated schools.

The need to eliminate discriminatory policies and practices within our schools will be with us long after the most serious barriers to racial and socioeconomic integration are removed. They were with us in the village schoolhouses many adults once knew. They will be with us in the educational parks we plan to create. Desegregating integrated schools is the most difficult challenge along the road to equalizing educational opportunity, partly because the problems are so pervasive and partly because agreement on neither goals nor methods will be easily achieved.

The central question for years to come is not whether there should be an educated elite, although that question is bound to get its share of the spotlight. Rather, it is how to assure equal opportunity to acquire whatever human attributes are needed by each individual for his pursuit of and contribution to the good life.

II

We now know that the most rapid period for the development of human characteristics is in the first few years of life.[12] We know, too, that significant gains on measures of general intellectual functioning are achieved by children whose mothers are exposed to a program of cognitive stimulation and skill development in child rearing. In general gains are nonreversible. That is, the attainment in a given characteristic at age 6, for example, includes what had been attained by age

[12] For a comprehensive summary and analysis of the research, see Benjamin S. Bloom, "Stability and Change in Human Characteristics." New York: John Wiley and Sons, 1964.

5 plus the increment achieved between ages 5 and 6. There is, of course, a loss of specific learnings with the passage of time.

The challenge to education—whether in the school, the home, or the larger community—is to produce the maximum increment for each interval of time. We want each child, whatever his genesis, to have optimum subsequent opportunity to achieve his potential, realizing full well that ultimate attainment depends on the circumstances of both his birth and his environment. Currently popular principles of education reject the theory of simple unfolding of the human organism, or at least support the notion that unfolding can be aided by environmental intervention.[13]

Perhaps the most dramatic instance of broad-scale environmental intervention is the provision of nursery schools in Israel for the so-called Oriental Jew. The parallel in the United States—launched hurriedly and lacking much of the theoretical underpinnings and evaluative structure of the Israeli program—is Head Start. Both are designed to produce near-optimal growth, especially in cognitive and language development, during the period immediately preceding entry into formal schooling. The very name of the latter implies the intent: to get a head start on school.

The Israeli experience suggests that the children enrolled in the nursery school program did, indeed, make gains over and above those predicted for them without such exposure. On the discouraging side, however, the followup of these children in school suggests that they did not make near-optimal growth during subsequent time intervals. There was a cumulative deficiency by the end of the second and third grades.

The hard data on Head Start are not yet in; however, some of the informally-gathered data are encouraging, although we suspect that the experience was not sufficiently sustained. But the deeper concern is that Head Start will prove to have been but a palliative for the children affected.[14] Children from harsh environments, when in school, will lag behind their environmentally advantaged counterparts—whether or not exposed earlier to Head Start.

[13] There is growing support for the possibilities of chemical intervention but these are, at present, too controversial and too little supported by prolonged experimentation to enter significantly into public policy. See Barry Commoner and others, "The Elusive Code of Life," *Saturday Review* (Oct. 1, 1966), 71–79.

[14] In the long run, the significance of Head Start may prove to have been symbolic. It alerted us dramatically to our long-standing delinquency regarding the welfare of substantial numbers of our children.

There is the obvious reason. The environmental circumstances inhibiting optimal cognitive and language development are not fundamentally affected by Head Start. They persist to detract from what should be the stimulating effects of school. This fact is profoundly discouraging to educators who cannot be expected to change these conditions in significant ways.

But there is also, in my judgment, a much more subtle reason. Traditionally, schools have not been markedly counter-cyclical to the conditions of their surrounding environments. In fact, they have tended to reinforce the conditions brought into the schools by the pupils. This was true of the village schoolhouse. It is true of the urban or suburban ghetto. It will be true of the educational park, unless we are more aware and more imaginative than we have been in the past.

III

The one thing that schools are authorized to do something about is their own programs. The fact that children often come to them grossly undernourished both physically and mentally is most unfortunate. But it is a fact—a fact that cannot be rolled back and that must not be ignored. (Even if schools were to extend their scope downward to include all four-year-olds, there would still be the facts of gross differences in "readiness" for school to be reckoned with.) Similarly, the fact that the circumstances of deprivation prevail, often throughout children's school lives, also is most unfortunate. But this, too, is a fact that can be neither rolled back nor ignored. The crucial question is, "Given these facts, how should schools take account of them in *planning and conducting their programs?*"

I have said that schools are not markedly countercyclical; that they tend too much to reinforce rather than offset environmental distortions or emphases. I have said, further, that certain conceptions of school function, expectations for learners, and school practices tend to segregate and stereotype boys and girls even within otherwise integrated schools. Such statements demand clarification and documentation.

Our expectations for schooling are, in general, coverage of a predetermined body of material by all students within a specified period of time, usually a year and a grade.[15] Coverage, therefore, becomes

[15] John I. Goodlad and associates, "A Study of Childhood Schooling in the United States," mimeographed report (unpublished and not yet ready for distribution), 206 pp.

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the function of schooling. Commonly, we protest otherwise but practices all too frequently belie our protestations.

The functions of schooling must be two-fold: possessing and shaping the culture and living effectively and satisfyingly within that culture. Efforts to fulfill such functions through *coverage* of content are anachronistic.

Further, common expectations for all students deny human realities. Children come to school from markedly different backgrounds, with widely varying levels of attainment and with striking differences in their readiness to proceed. These environmental conditions tend to persist; levels of attainment tend to become more varied as pupils proceed through school;[16] and a class group at any given time reveals gross differences in the readiness of individuals within that group to proceed with a specified learning.

The grade levels and graded expectations that have characterized the conduct of American education for more than 100 years appear to be out of phase with today's conceptions of school function and the growing body of evidence about individual differences among children.

Efforts to make the graded system work have met with continual frustration. When it was fully realized that children do not and cannot complete the same work in the same period of time, the adjustment mechanism used was and is nonpromotion. Subsequent research revealed that nonpromoted children, when compared with promoted children of equal past performance and measured intelligence, perform at a somewhat lower academic level, decline in their social relations with other children and in their self-image, and lose interest in school.[17]

Nonpromotion, then, does not advance general intellectual performance, academic attainment, or individual self-respect. In time, it results in an accumulated backlog of generally undiagnosed learning problems; sixth grade academic achievement is lower in schools with high rates of nonpromotion than in schools with low rates of retention.[18] Nonpromotion—the major device employed to adjust the inade-

[16] John I. Goodlad, "Individual Differences and Vertical Organization of the School," *Individualizing Instruction,* pp. 218–219. Sixty-first Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, 1962.

[17] John I. Goodlad, "Research and Theory Regarding Promotion and Nonpromotion," *Elementary School Journal,* 53 (November 1952), 150–55.

[18] Walter W. Cook and Theodore Clymer, "Acceleration and Retardation," *Individualizing Instruction.* Ibid., pp. 179–208.

quacies of our graded school system—does more to segregate and stereotype slow learning children (and ultimately to force them out of school) than it does to remedy their educational deficiencies.

The reverse of nonpromotion, regular promotion for the slow-learning child, appears not to be a happy solution either. Although promoted children of mediocre past performance in general fare better than their nonpromoted counterparts, many reveal the undesirable consequences of being unable to contend with expectations of the higher grade. They express concern over parental attitudes toward their schoolwork, cheat more, and give indications of self-doubt.[19] If neither promotion nor nonpromotion produces desirable effects for slow-learning children within our graded system of schooling, then perhaps we must question the basic structure itself.

The second major effort of our schools to make the graded system work is a variety of class-to-class grouping practices. Always with us are proposals to bring together in "homogeneous" classes, pupils of like ability or present academic attainment. The "commonsense" argument is that gifted students, working together, will not be held back by their less able colleagues. Similarly, retarded pupils, proceeding at a more appropriate pace with others of like ability, will not be embarrassed by exposure to superior performance. Like many commonsense proposals in education, however, there appears to be little other than impassioned rhetoric to support it. In fact, practicability, research, and rhetoric argue equally strongly for the opposite position.

We have had little success in achieving anything that could reasonably be called homogeneous classes.[20] Ability grouping is particularly ineffective in this regard. Measures of intelligence have been markedly unsuccessful as criteria for bringing together classes that could be regarded as reasonably similar in general or specific attainment. Achievement grouping, on the other hand, which divides into smaller groups a group that is widely diversified with respect to attainment in any subject, obviously reduces the diversity in these smaller groups. But, because of the fact that each student varies so much from subject to subject in his own pattern of attainment, these more homogeneous groups remain about as heterogeneous in everything else as they were

[19] John I. Goodlad, "Some Effects of Promotion and Nonpromotion Upon the Social and Personal Adjustment of Children," *Journal of Experimental Education*, 22 (June 1954), 34–43.

[20] A sharp distinction must be made between setting up homogeneous classes, discussed here, and the everyday practice of grouping children within a class for a variety of changing purposes after pupils have been assigned to classes on some basis.

before. It takes a very large school population and constant grouping and regrouping to bring together reasonably homogeneous classes for each subject.

Even under such conditions, however, the homogeneity is more apparent than real. Balow,[21] using eight components of reading performance, tested classes of second grade children grouped homogeneously on the basis of two general components of reading performance. He found that the assumed homogeneity no longer maintained; heterogeneity corresponded to that of the previously desegregated classes. About all we can conclude about a class that appears to be homogeneous is that we have not yet looked closely enough to find the heterogeneity that really exists.

Since classes set up as alike in attainment or ability have sloppy edges, it is not at all surprising to find that studies of their effects are inconclusive. The findings simply do not lend credence to a tight argument for or against such class-to-class grouping so far as subsequent academic achievement is concerned.[22]

There appear to be at least three questionable side effects from the use of nonpromotion and interclass grouping in our elusive pursuit of grade standards and homogeneous classes. First, there is a steady sifting of perhaps a quarter or more of the students to slow classes, the 25 percent of the student body that receives 75 percent of the failing marks. Most instances of grade failure and repetition occur in this segment.

Second and related, teachers of classes segregated for supposed likeness of pupils assume far greater likeness than exists.[23] In effect, the gross differences among children in any group are obscured rather than revealed. It is not likely, therefore, that there will be adequate instructional provision for individuality.

Third, children's grade failure and segregation on the basis of limited ability or performance does not enhance their self-respect. Further, not much is expected of such children. In fact, we have some evidence to suggest that learning proceeds more effectively when teachers have

[21] I. H. Balow, "Does Homogeneous Grouping Give Homogeneous Groups?" *Elementary School Journal,* 63 (October 1962), 28–32.

[22] For a review of the research, see Ruth B. Ekstrom, "Experimental Studies of Homogenous Grouping." Princeton, N.J.: Educational Testing Service, 1959; and Nils-Eric Svensson, "Ability Grouping and Scholastic Achievement." Stockholm, Sweden: Almqvist and Wiksell, 1962.

[23] John I. Goodlad and Robert H. Anderson, "The Nongraded Elementary School" (Revised Edition). New York: Harcourt, Brace and World, Inc., 1963. See ch. 1.

high but realistic standards and when everything possible is done to enhance students' self-image.[24]

In summary: (1) environmental deprivation characterizes the social milieu of a substantial segment of our pupil population throughout the school career; (2) traditional practices of nonpromotion and interclass grouping in the graded school system are likely to pile up in academically segregated classes a disproportionate number of disadvantaged children and youth; (3) experience and research to date suggest that such practices do not remedy the learning problems of pupils who are so segregated; and (4) certain side effects of nonpromotion and interclass homogeneous grouping in schools seem to aggravate the very conditions education for disadvantaged boys and girls is supposed to remedy.

Common use of the graded school system and its accompanying adjustment mechanisms of nonpromotion and homogeneous class grouping tend to create an internal school condition of academic segregation of slow-learning youngsters. Since environmental deprivation and school retardation are disproportionately the lot of the Negro, academic segregation in racially integrated schools becomes also racial segregation. Many Negroes are thus denied the assumed advantages of integrated schools. The goals of the educational park are subverted by traditional practices deeply imbedded in schooling. Clearly, we have before us a perverse reality; the necessity of preventing and remedying segregation in the integrated school.

IV

The fact that racial segregation accompanies academic segregation in the nominally integrated school sharply delineates the need for two positive sets of educational circumstances. First, each student should work at his optimal level of readiness in each field of endeavor without stigma and without enforced separation from his natural peers. Second, the school milieu should provide for diagnosis of the readiness and learning potential of each child. Subsequent prescription must not result in the immobilization of the child in a segregated class placement.

In regard to the first, a trap to be avoided is that of simply moving each child along with his age group regardless of accomplishments.

[24] For an example of the kind of research involved, see R. Rosenthal, "Covert Communications and Tacit Understandings in the Psychological Experiment," unpublished manuscript.

This is a misguided educational practice of earlier eras, another poor adjustment mechanism of the graded system. The age of a child is far more useful in determining his social relationships than in determining his readiness for specified learning tasks. *A recommended way out of the dilemma of adjusting learning tasks upward or downward without destroying the age-group propinquity most boys and girls seem to seek and need is the nongraded school.*

In regard to the second, there is no evidence to suggest that homogeneous grouping either increases the likelihood of individual pupil diagnosis or provides the range of alternatives necessitated by pupil variability. This practice assumes conditions that do not really exist and encourages a monolithic approach rather than a varied approach to instruction. Pupils, varied as they are in present attainments, characteristics, and rates of progress, need to be placed in a wide and changing array of groups, groups that are reconstituted through diagnosis of and prescription for the students comprising them. *A recommended procedure for providing the essential flexibility involved is cooperative or team teaching.*

Unfortunately, both nongrading and team teaching, in practice, often deviate markedly from the conceptions supposedly underlying them. For example, most schools claiming to be nongraded have not adjusted learning tasks upward or downward to accompany individual differences in an age group without walling off members of that group one from another. In fact, many so-called nongraded schools are not nongraded at all; they simply employ the time-worn practice of homogeneous interclass grouping under no modern label. Those responsible for educational parks must be acutely aware of this corruption and, should they move to nongrading, be sensitive to the fact that new labels do not necessarily beget new practices.

Similarly, some schools claiming to practice team teaching have brought about nothing more than a systematic sharing of subjects among teachers. The same old practices of stereotyping and segregating pupils continue under a new label. Neither diagnosis nor prescription from an increased range of alternatives is enhanced.

The vagueness and misconceptions regarding nongrading and team teaching are such that they are not likely to be clarified by general talk. Specifics are called for, in spite of the fact that specifics have inherent in them the danger of seeming to deny other alternatives. There are many ways of organizing and conducting nongraded, team-taught

schools. The intent below is to illustrate conceptions that hold unusual potential for desegregating the integrated school.

Figure 1 suggests the nature of the central problem to be reckoned with. The spread in reading attainment of a second grade class is usually from four to six years. The lower end of the scale cannot be depicted adequately because reading tests are not constructed to measure it. The spread in fifth grade class is eight or more years and overlaps the second grade at its lower end. But the spread in age at each of these grade levels is only a year or a little more.

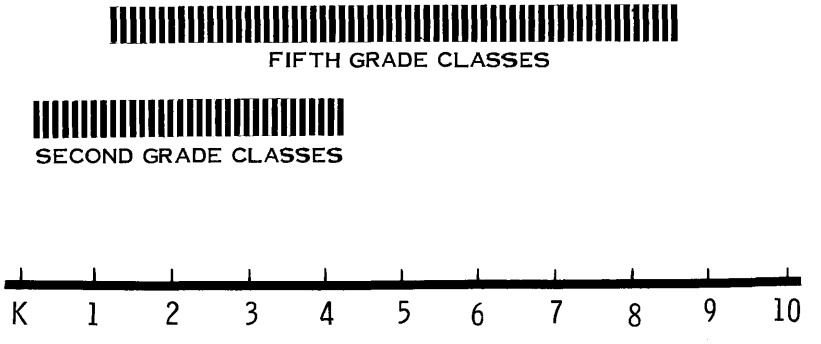

FIGURE 1. COMMON SPREAD WITHIN AND OVERLAP OF SECOND AND FIFTH GRADE CLASSES IN READING.

Bar graphs for each of the other subjects would reveal somewhat smaller but, nontheless, substantial ranges in achievement. Further, if the attainment of each child were plotted on these bars, a substantial variation in attainment from subject to subject would be demonstrated. It is impossible to provide appropriate programs of instruction for each child in these divergent patterns without ignoring present grade placements of children.

To ignore grade levels and grade placements is to take a significant step toward nongrading. Two alternative approaches suggest themselves. The first is simply to assign each teacher a class of, for example, seven-year-olds who normally would be in the second grade. There is nothing new here. But then the teacher is instructed to ignore the grade level and is provided with a diverse array of instructional materials more realistically geared to the spread of the group. This procedure need not cost more; materials simply are distributed differently. Each teacher, in a self-contained classroom, strives to reach the floors

and ceilings of the class through a variety of individual and small-group procedures. The elipses in figure 2 suggest the effort to encompass the full range of individuality while maintaining in one classroom a completely integrated age group. Homogeneity in age is maintained as in graded schools but heterogeneity in present attainment is recognized and, within the capabilities of each teacher, is dealt with.

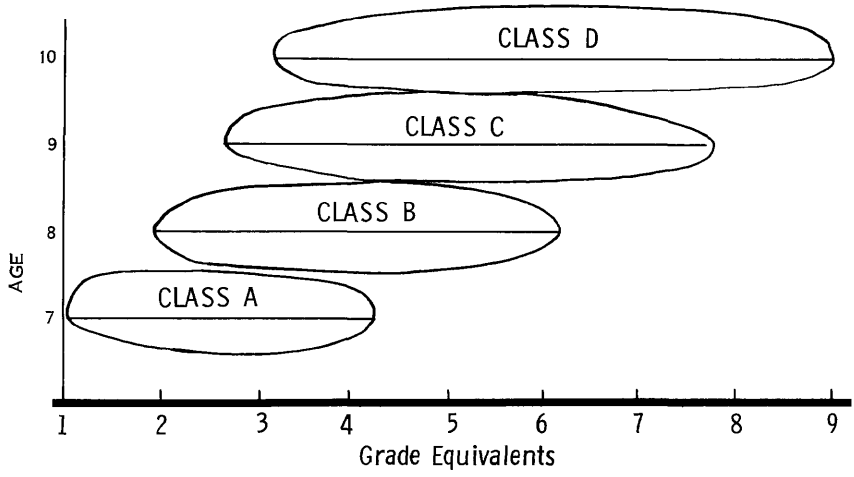

FIGURE 2. SPREAD OF INDIVIDUAL ATTAINMENTS PROVIDED FOR INSTRUCTIONALLY IN NONGRADED, SELF-CONTAINED CLASSES.

This approach places a heavy burden on the teacher. Actually, the range of individual differences to be managed is no greater than in a graded, self-contained classroom. But the expectations are different. The teacher is being called upon to provide for individual differences. By contrast the graded system obscures individuality and suggests the desirability of striving for a common denominator. Meeting the expectations of nongrading in a satisfactory manner simply is more demanding.

For this reason, teachers increasingly are being attracted to a second alternative, one in which nongrading is coupled with cooperative or team teaching. Two or more teachers of nine-year-olds, for example, bring their classes together and consider them to be just one large instructional group. Then, planning together, they subdivide this group on a day-by-day (sometimes hour-by-hour) basis, occasionally teaching a single large group but usually working with small clusters or with individuals.

There appears to be many advantages in this procedure.[25] It becomes possible, for example, for one teacher to concentrate on the particular learning problems of perhaps a dozen boys and girls while another teacher supervises the remainder. One teacher is able from time to time to stand back from bustling activity in order to observe the behavior of one child. Then, all the teachers diagnose and prescribe on the basis of these observations. More students and more teachers make possible many kinds of groupings. No child need be permanently in any one group. Hence, segregation within the school is reduced to a minimum.

Once teachers manage to hurdle the physical and psychological barriers of the graded, self-contained classroom and to perceive the flexibility of nongrading and team teaching, they usually become creative in developing many variations on the themes introduced above. A particularly promising one for the avoidance of segregated class groups is the inclusion of several age levels in the nongraded, team-taught group. As nongrading becomes a way of both thinking and practicing education, age becomes less important in assigning pupils to groups. Figures 1 and 2 reveal that age is a rather poor criterion for determining what to teach or what already has been learned.

Figure 3 shows five clusters of students and teachers in a nongraded, team-taught school. Each elipse encompasses both the ages and the grade equivalents brought together in each team. The size of the elipse, small or large, suggests that clusters include varying numbers of students and teachers. Thus C is the smallest cluster and E the largest.

Following from left to right in Figure 3, then, cluster A contains boys and girls between the ages of 6+ and 9+ and provides instruction across what would be four grades in a graded school. Cluster B spreads over ages 7 through nearly 11 and includes three grade levels. Cluster C includes three age levels and four grades. Cluster D takes care of children from 7+ to 9+ and spreads across six grades. Cluster E includes ages 8, 9, 10, 11, and 12 and five grades. Of course, grade levels are ignored but the concept is used here to convey the departure from typical, graded conventions.

Groups might well contain from 50 to 150 or more pupils and the equivalent of two or more teachers. The word "equivalent" is used

[25] For a comprehensive treatment of the theory and practice of team teaching, see Judson T. Shaplin and Henry F. Olds (editors), "Team Teaching." New York: Harper and Row, 1964.

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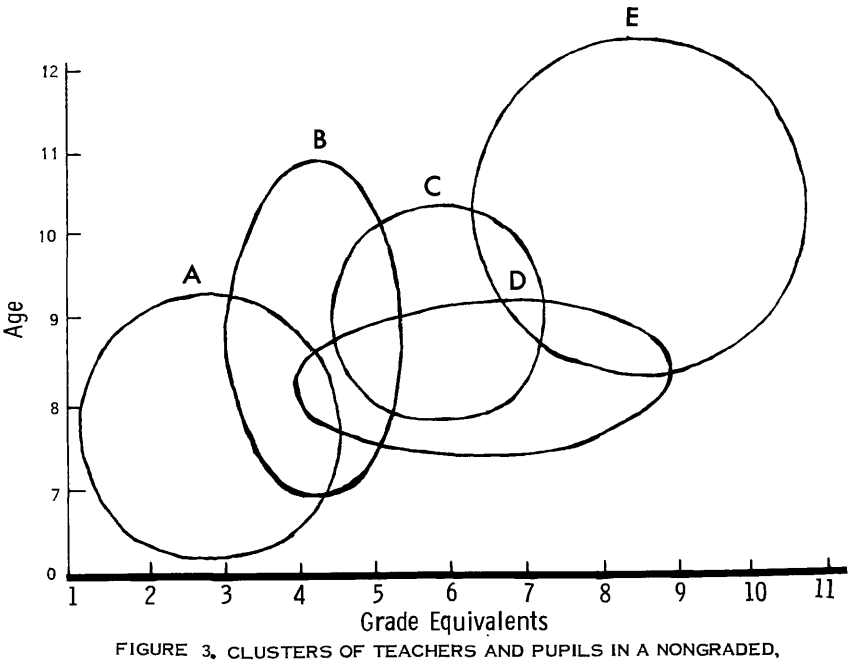

FIGURE 3. CLUSTERS OF TEACHERS AND PUPILS IN A NONGRADED, TEAM-TAUGHT SCHOOL.

here because there is no need to follow conventional staffing patterns. A group of 90 children might well be taught by two full-time teachers, two interns, two student teachers and a community helper. For example, although the University Elementary School at UCLA is budgeted for a full-time staff of 25 persons, over 50 are on the payroll, a minority of whom are full time.[26]

Nongrading and team teaching of this more complex species are possible in traditional school buildings but such patterns of class organization and the new flexible buildings go hand in glove. Any school district that is today still building compartmentalized, egg-crate schools is wasting the taxpayers' money.

It takes only a little imagination to perceive not only possible variations along the lines of what is depicted in Table 3 but also the potentiality of such patterns for dealing educationally with individual differences. There is no need to segregate slow learners in a nonpromoted or "homogeneous" class because they are unable to do the work of the grade. The norms of expectancy simply are spread out to reach them; there are no grades. It is not necessary to overlook the

[26] John I. Goodlad, "Meeting Children Where They Are," *Saturday Review* (Mar. 20, 1965), pp. 57–59, 72–74.

limited accomplishments of a child simply to keep him with his age group. By spreading out the ages in the total group, it is possible both to adapt academic work to individual needs and to provide appropriate peer associations. There is no sifting of slow learners, usually those who are environmentally disadvantaged, to academically and often racially segregated classes because youngsters of all academic levels are provided for within the nongraded, team-taught cluster.

V

Educational parks, enrolling children from all racial and socio-economic segments of the city, constitute a bold effort to rectify long-standing inequities in educational opportunity that have disproportionately disadvantaged Negro boys and girls. Ironically, however, they reveal the fact that certain long-standing school practices have tended to perpetuate the very environmental disadvantages that education is supposed to overcome. Specifically, grouping practices based on measures of ability or attainment have tended to bring together in segregated class groups those children who seem to be profiting least from school. These tend to be environmentally handicapped children. In the big cities and in the new educational parks being developed in some of these cities, these children are or will be disproportionately Negro.

The problem lies not with the educational parks as such but with their likelihood of perpetuating those grouping and grading practices that characterize our schools generally. These practices segregate the slow-learning child. If educational parks are to accomplish their commendable mission and avoid resegregation in ostensibly desegregated schools, they must move vigorously to certain new practices now being recommended, practices designed to overcome inequities in educational opportunity through concern for human variability and individuality.

One of these is nongrading which seeks to raise the ceilings and lower the floors of educational expectancy and provision to coincide with the full range of individual differences always present in an instructional group. The second is team teaching which breaks down the teacher-per-class-per-grade concept and opens up possibilities for teams of teachers, teacher aides, and others to work together in planning programs based on diagnosis of all those individuals constituting an enlarged group.

The combination of nongrading and team teaching is peculiarly powerful in educational parks. The very size of such institutions provides an endless array of alternative ways to set up clusters of teachers and students. At the same time, each cluster takes on an identity and provides a school within a school to offset the dangers of anonymity in the large school setting. Most important of all, this pattern of school and classroom organization provides maximum flexibility with respect to the placement and re-placement of pupils for instructional purposes. Segregation of any group on any criterion for an extended period of time is so unlikely to occur through the natural operation of the system that it would have to be brought about by deliberately sabotaging the system. By contrast, such segregation is difficult to avoid in the graded school.

Nongrading, team teaching, and other flexible approaches to school organization do not in themselves remedy the educational disadvantages of harsh environments. But they do remove some of the norms and traditions that have contributed to stereotyping and segregating boys and girls who carry their environmental disadvantages into the classroom throughout their school experience. And these innovations create an expectancy for individualized approaches to learning, approaches that tend to eschew segregated groups.

Educational Technology and The Educational Park

(This paper was prepared for the Commission by Francis Keppel, Chairman, Board of Directors, General Learning Corp., New York City.)

This paper is written in response to three issues raised by the Commission:

1. What does the present state of computer technology and your views of its future development suggest about its possible use in providing substantially more individualized instruction?
2. What possibilities would computer-assisted instruction have in large educational facilities such as the parks? Is there reason to believe that consolidation of school facilities would increase the flexibility with which computers could be used in instructional programs?
3. We would also like to address ourselves to the question of the possibilities of the use of technology in educational parks. We have been thinking in terms of the possible advantages and disadvantages of such large facilities. There have been suggestions that they will offer the opportunity for considerable improvements in the quality of education, which is probably true. However we are concerned about the possible disadvantages which might flow from sheer numbers and physical size. One of the major questions, I suspect, would have to do with the forms of school organization which would eliminate or minimize those disadvantages.

Certain general comments seem appropriate before turning specifically to the relation between educational technology and the educational park. To begin with, it must be emphasized that hard evidence on the educational returns from much of the "new technology" is simply not available. The large-scale program of research and development financed by the Federal Government is very recent, and the regional laboratories supported by the U.S. Office of Education are still at the organizational stage. There has been no lack, however, of enthusiastic statements about what the new technology can and will do—someday. The arduous task between now and someday, however, requires going through the painful step-by-step processes of trial and

change, of persuasion and defense, of innovation and reaction, with little precedent available as a guide.

Under these circumstances, no dependable estimate can be made of the relative costs and social and educational returns involved in introducing educational technology into the parks as compared to the costs and returns of other methods that may be open to the society to achieve the ends sought by the Commission. Conceivably, investments in metropolitan planning or housing or transportation could lead to equality of educational opportunity more rapidly and effectively than investment in educational parks which include substantial use of new technology. This paper does not attempt to deal with factors of cost or relative efficiency because of lack of evidence on which to base a judgment.

Though there is a lack of data on the results of new technologies, we do have some experience from earlier efforts to try out new educational ideas in the schools, whether or not of a technological character. There has been a rapid swing of the pendulum from fad to forget. The very lack of an orderly system of research, development, demonstration, and adaptation to school needs has created a doubting attitude among many educators about highly touted new answers to old problems. Seasoned teachers are not unaware that public attention can be fickle, and that if some new idea goes wrong, they will still be held responsible for the teaching of the next year's crop of students. And teachers have an effective pocket veto on innovation. The Commission should hesitate, therefore, to put too many of its real and rhetorical eggs in the basket of educational technology. The very act of doing so may create resistance to what could be, as the author will attempt to show later, a promising way to help to achieve equal educational opportunity.

To say that the lack of hard data on results of technology and the nature of the attitudes of educators continue to recommend caution is not to say that the new technologies could not be helpful in the solution of problems of teacher recruitment for educational parks, or their retention on the job, or in other ways. Indeed, it seems likely that many teachers would like to take part in new ventures that increase their productivity as teachers—but only if they do take part in fact. They can reasonably be expected to resist a rhetoric that announces their demise, or relegates them to clerks and makes technology the master. The problem is one of achieving a proper balance between new possibilities and retaining the educational experience of past decades.

One last point is in order, though perhaps so obvious that it requires apology before its statement. The rationale for investment in new educational technology is more relevant to other educational issues than to providing equal opportunity or remedies for segregation; so indeed is the rationale for educational parks, though the Commission's concerns are necessarily centered on these issues. While the focus of this paper is, as requested, on technology in relation to parks and the problems of segregation and disadvantage, it should be considered in the context of the other social and educational forces that have brought attention to educational technology: The expansion of knowledge and the need for its storage and retrieval, the need for more effective use of teacher talents, the availability of new techniques and equipment, et al. The rationales for educational parks and for new educational technology may be related, and helpful to each other, but they are not the same. It seems likely that the advantages of each set of ideas will reinforce each other, but it is also possible that failure or apparent failure in one area could slow progress in the other. It would be tragic if two promising ideas harmed each other, and the best defense against such a possibility is to make it clear that each is justifiable on its own terms and worth the chance of joint development.

Turning now to the questions dealing with computer technology, it is essential to start with a distinction between the state of the art of computers as teaching and learning devices, which can be described as very new, promising, and yet to be proved, and computers as aids to administration, where a strong case can be made that they have proven their immense usefulness in other parts of our society, though not yet in education. In both areas the need for research, development, and demonstration cannot be overstressed, and the cost of such programs should not be minimized. There is almost surely no simple and single solution to the use of computer technology for either purpose. Indeed the Nation must look forward to years of effort in developing a variety of new scientific aids to learning.

What might happen in the schools as technology expands has been called "education's industrial revolution." Some of the technology, notably closed-circuit and educational TV, derives its advantages (both pedagogical and economic) from its application to students in a group. Other parts, films and film loops, for example, can be used one way or another by groups or by individuals. But it is computer technology, uniquely, that realizes its power only as it helps individual students to

learn. Only as a computer's enormous capacity for storing and displaying information and its ability to adjust sensitively and logically to new information (performance) are put to use by individual students does that capacity and ability make teaching sense and economic sense.

It would be wrong, and self-defeating, for either the most ardent proponent or the most experienced researchers in the field to claim too much for computer technology as a learning tool right now. Its powers must be validated. Its advantages will have to be made available at a price schools can afford, and strenuous efforts are now being made by government, in the academic community, and by business to conduct research and work out ways of proceeding to that end. It seems hard to doubt that, given enough opportunity to do research and development work with real students in real schools, the power of computers can be harnessed to the advantage of both the individual student and the teacher who guides him.

The problem is not the design of the computer itself or the means of access to it by student or teacher. On these issues rapid, even astonishing progress has been made. It is not inconceivable that through techniques of time-sharing of a central facility and other means costs per student can be brought into a reasonable relation to annual school expenditures. The more difficult problem is the creation of programs to be used by teachers and students, which involves complex issues of combining the efforts of university scholars, computer specialists, and teachers in the schools. High development costs are certain and complex issues of redefining the role of the teacher in the school are involved. While bits and pieces of the problem have been explored, there is no single, overall pilot project that can be used as a referent point. Nevertheless, there are exciting explorations of the use of the computer to provide more individualized learning. These have not reached the stage at which it is possible to predict with any confidence the effect of substantial use of computer aided instruction on the social system of the school itself, which is necessarily a matter of great importance for educational parks. The areas of curriculum to which it is best adapted and most effective, for example, will require far more investigation and development. Yet enough has been done to make it possible to say with a good deal of confidence—

1. that learners of all ages, including the very young, can relate themselves to computer technology: it is not limited to the highly trained;

2. that it permits flexibility: it is not necessarily a straightjacket that discourages a questioning mind;
3. that it has enormous potential for diagnostic purposes: the record of trials and errors and confusions and accomplishments of the learner are at once made available; and
4. that it quite literally can adjust itself to the student's pace.

For these reasons, it seems likely that the power of the computer technology may be of particular value for the pupil whose home background and/or prior education puts him behind in the effort for equal educational opportunity. The computer program has the infinite virtue of patience and has in theory all the time in the world. It can be programed not to punish unintentionally, and there is no reason why the learner cannot feel a certain sense of personal "ownership" of his method of access to its services. Computer technology is color blind and has no memory of race. Linked to programed instruction and flexible systems of staff allocation, the computer has a major contribution to make. And the economic facts of life suggest that larger units might be able to use the technology more effectively than the smaller units.

The above is addressed to computer technology only in one role—in the learning process itself—and suggests that a great deal of development work is needed. Here the Commission might strongly urge that parks be devised with the use of computers at the start with a heavy emphasis on development of programs and techniques. But the state of the art is such that computer technology could help at once in making more effective use of teacher time and in helping achieve more flexible groupings of students—for reasons that may have little directly to do with teaching as such. The number of papers teachers handle in the line of homeroom and/or subject-class duty (attendance, grade recording, report card writing, permanent record card keeping) is staggering and frustrating. It is a major cause of disaffection in the teaching profession and its control could be a major contribution to achieving individualized instruction. If computer technology is already offering demonstrable savings even to a small department store, it is capable of doing the same for a fair-size high school, and surely for an educational park. Right now, computers can rationalize the paperwork load and lift it from the backs of teachers and, of course, administrators.

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Yet "paper work"—if the phrase is interpreted to include any kind of method to record results and make information available—is essential—to a kind of schooling that puts heavy emphasis on diagnosis of individual problems in learning and on the adjustment of instruction to the pace of the learner. Such schooling is needed by the disadvantaged. Unless this problem is solved, it is possible that the sheer size of the educational park will make it more, rather than less, difficult to adjust to their needs. The use of computer technology for administrative purposes seems, therefore, to be one of the, perhaps the, most hopeful possibility now readily available to the schools, and particularly to educational parks. It deserves intensive development.

It is not unlikely that at present educational parks could be as valuable to computer technology as the technology is to educational parks. The fact that parks are a new idea and have to be built from the ground up makes it inevitable that no one can say precisely how best to adapt the computer technology to the educational need. The very newness of the situation cries out for overall analysis and total planning. The design problems involved in computer installations can best be met and dealt with only as part of a whole plan.

A footnote on the question of introducing computer technology may be appropriate. Presumably, parks will be expensive, involving acquisition of large tracts of land and erection of many buildings in a costly complex. In such a setting the cost of computer installations of all sorts might not bulk so large as a percent of the total cost as they would appear on the top of a normal budget, and hence present less of a problem to local government and perhaps less of a fear to local educators.

This point deserves the Commission's attention. For it is undeniable that computer technology for some is an angel sent to help those in trouble, and for others is an ogre out to eat them up. Seen as part of a larger whole, computer technology falls into place as a powerful tool in the provision of substantially more individualized instruction.

As far as technology is concerned, the method of access to the computer by the student does not necessarily lead to the conclusion "that consolidation of school facilities would increase the flexibility with which computers could be used in instructional programs." Potentially, the computer technology is adaptable, though presumably at varying costs, to a widely differing set of physical circumstances of the learner, from the classroom to a special "computer" room in or out of the

school. But the opportunities involved in planning for its use in a new setting for both administrative and teaching purposes, and the general argument based on economy of scale, suggest that the educational park concept is likely to be a healthy setting for the development of the technology.

The key phrase in the preceding sentence is "in a new setting." For the computer technology is not easy to absorb into the usual school routine. It is sure to have a disturbing effect on any social system into which it is fitted and the potential advantages of being a part of a new system from the very start are perhaps equally great to the educational park concept and to the development of computer technology. The reason for greater flexibility in the setting of the educational park, in short, has less to do with the strictly technical aspects of the computer and its applications than it has to do with the problems of innovation in general and the finance of schools in particular.

As to the broader question of the use of technology in educational parks, and its relation to "possible disadvantages which might flow from sheer numbers and physical size," it seems safe to say that the newer educational technology can be used to reduce the disadvantages—but only if consciously planned with that goal in mind. It is not hard to find, for example, existing schools in which students are treated as ciphers whether or not use is made of technology of various sorts.

We must return again to the need for systematic planning of the use to which the several types of new technology are to be put. If it is to be the objective of the educational park to individualize instruction, as it should surely be, especially for the disadvantaged, then the technology of all sorts can be adapted to that purpose. Assuming that one disadvantage that causes particular concern is the learner's sense of being lost in a huge crowd, with no one to care for him, the use of the diagnostic powers of the computer technology, programed instruction, and films for small groups or individuals offer a powerful tool. It can too easily be assumed that the new technology somehow has to be bigger than the child and frightening to him when in fact it can be as natural as a desk and built to his scale. The question is not primarily that of the physical equipment, but rather the way in which children are grouped with each other and in relation to the teachers.

For the purposes of the educational park, the related methods of the nongraded approach and of team teaching seem to offer the best or-

ganizational techniques to take advantage of the new technology, while at the same time keeping the size of the student group to manageable proportions for purposes of individual attention and maintenance of discipline. It seems likely that there will be an increasing variety of technological aids to learning other than the book—films, other audio and visual materials, programed instruction, language laboratories, as well as the computer technology—available to student and teacher. The rigidity of the class of fixed size mitigates against the flexible use of such aids, partly for the reasons of discipline but largely because of the teachers' inability under such a system to choose the right aid at the right time for the right child or small group of children.

The possibility of constant direction of a small staff and a limited size student group by a master teacher using specialists and assistants offers an opportunity to reduce substantially the disadvantages of large numbers and increases the chances of individualized instruction. But there is a major proviso that must be entered, even though it falls partly outside the scope of this paper, to qualify the suggestion on forms of school organization that might reduce the disadvantages of large size. Both nongraded approaches and team teaching require special preparation or special retraining for teachers. So does the use of the new technological aids to learning. It seems essential, therefore, that from the start the educational park will have to be planned in collaboration with universities and colleges and probably should serve as a center for teacher preparation and training. Experience with training programs at several universities interested in nongraded instruction and team teaching suggests that the use of schools for such a purpose can help to create and maintain an atmosphere of excitement and professional concern with the needs of the individual student. The technique of joint appointment between school and university staff also deserves the Commission's attention in this connection. For the problems of sheer numbers and the loss of individuality apply as much to teachers as to students.

In summary, it may be said that computer technology is a promising, but insufficiently developed or tested, instrument for individualized instruction. It seems particularly promising in the diagnosis and solution of the education problems of the disadvantaged. The computer as an aid to the solution of administrative problems related to the educational park concept deserves vigorous and immediate application. The very fact that the parks would be new suggests that they would be

better fitted to take advantage of the computer technology than existing schools, but only provided there was a program of systematic analysis and planning from the start. The problem of size presented by large educational parks might be solved in part by the use of nongraded instruction and team teaching organization, if linked to the new technology and if associated with teacher preparation and retraining.

Towards Educational Equality: The Teacher and the Educational Park

(This paper was prepared for the Commission by Dr. Dan C. Lortie, Midwest Administration Center, Department of Education, University of Chicago, Chicago, Ill.)

I

Educational inequality for Negro children, and for others in disadvantaged circumstances, results from the interplay of complex factors.[27] One of the key factors is the inequality represented by the differential distribution of public school teachers. The fact of that inequality is clear; while schools and school systems in white, prosperous areas generally select their teachers from a number of interested candidates, positions in slum schools go begging. Children whose families and communities equip them to learn are taught by teachers perceived as able by those operating the academic marketplace while students with cultural disadvantages receive their instruction from teachers who do not receive the "better jobs."[28] Teacher distribution does not always result, to be certain, in superior teachers for the well-to-do or inferior ones for the poor; slum schools have some outstanding faculty members and the wealthiest suburbs their ineffectives. Yet the allocative system features a basic bias against the slum school—given the operations of the market, it does not obtain a proportionate share of teacher talent. That bias means intensification of difficulties for the poor and augmentation of advantage for the well-to-do.

Inequities in distribution are not surprising in an economy where persons are free to choose their employment. The gap in desirability

[27] The reader will note that references to students who suffer inequalities found in public schools are not exclusively to Negro students. There are other groups, such as Puerto Ricans in New York, who experience many of the same difficulties, and some white students encounter similar problems, as in the case of the Southern white immigrants in Chicago. The major thrust, however, is toward the Negro student in cities outside the South.

[28] For a detailed study of inequities experienced by minority group children, see Coleman, James S. et al., "Equality of Educational Opportunity," U.S. Department of Health, Education, and Welfare, Office of Education. (U.S. Government Printing Office, Washington, 1966.) Esp. pp. 122–182.

between the slum school and others is simply too great for us to expect other than the result we see. Teachers, like others in the labor market, gravitate to those positions they see as more desirable. The contrast between the slum school and an affluent one contains more than the visible features of shabby surroundings, the atmosphere of defeat, the violence of one compared to the newness, brightness, and tranquillity of the other. The slum school means the concentration of troubled children in one place and a resulting intensification of difficulties; the outcome is a subculture among students inimical to learning and frustrating to teaching. Teachers, generally persons who take their work seriously, prefer to work where the expenditure of skill and energy is more likely to produce discernible results. The plain fact is that many, perhaps most, teachers feel that it is impossible to attain a sense of professional achievement in the slum school. Given that belief, it is small wonder that most teachers avoid the slum school where they can or, once in it, seek transfer. Small wonder that observers feel that some teachers, trapped in the slum school, give less than their best.

Movement away from slum schools is built into the career and reward system of public school teachers. Opportunities for promotion are restricted for those who wish to remain in the classroom and those who wish to improve their standing as teachers do so by moving from one school to another.[29] Career success means going to a "better school" with "better students;" the encomium coincides with institutions in more prosperous areas and students from higher income families. The core daily rewards of teachers, moreover, are enhanced by attentive, eager-to-learn students. When such students do occur in slum classrooms, the student subculture may make it expedient for them to conceal interest in learning. The clear discrepancy in teacher rewards between slum and other schools makes it unlikely that inequities in teacher distribution will be readily dissolved.

The last few years have witnessed increasing concern for the fate of Negro and other disadvantaged children and today we see the expression of that concern in a variety of programs directed toward improving instruction for the "culturally deprived." There are saturation efforts, schemes to recruit and train teachers and talk as well

[29] This pattern was first observed by Howard Becker in his study of the Chicago public school teacher. It has been found to prevail in the author's research on teachers in the Northeastern United States as well.

about paying higher salaries to those who staff slum schools. Are such approaches likely to redress the imbalance in teacher distribution?

Special programs for the disadvantaged have received impetus from Title I of the Elementary and Secondary Education Act. It is too early to learn about, much less assess, the hundreds of specific projects spawned by Federal support. We can, however, estimate some of the likely effects on teacher supply associated with the dominant strategy employed in most of these undertakings—the concept of saturation. That concept calls for the provision of more instructional services to students in poverty areas; although it is primarily an intensification of conventional approaches to instruction, it can have certain novel consequences.

The immediate effect of saturation programs is to strain existing resources of professional personnel. More teaching requires more teachers and bridging the gap between the school and its environment requires social workers, psychologists and new specialists such as school-community agents. Shortages of skilled professionals make school systems readier to employ subprofessionals to take on the less skilled aspects of the teacher's work—tasks generally disliked by teachers. Saturation programs frequently provide for special inservice training of teachers in slum schools. Will the opportunity to work with a variety of specialists, to discard disliked tasks and to gain specialized knowledge produce an attractive role for teachers?

It is not likely that saturation programs will constitute a long-range solution to problems in teacher distribution. The potential gains associated with working with specialists and obtaining relief from tedious chores are not the exclusive prerogative of teachers in inner-city schools. It appears that we are on the verge of widespread differentiation in the teacher's role; one can argue, in fact, that the more flexible and wealthier school systems will move toward such differentiation more rapidly not because of economic pressures but simply because such differentiation has intrinsic appeal. Nor does it seem likely that specialization based on work with the disadvantaged will add to the stature of slum school work. Work with the poor has always been challenging in the professions, but the usual outcome is for prestige to be aligned with service to persons of high rather than low social standing. Perhaps the best hope in saturation programs rests in the capacity of some schoolmen to generate excitement for their purposes and to hold more teachers than normally choose to stay in slum schools.

We are seeing the emergence of programs of teacher preparation designed for those who plan to teach in inner-city schools. Such programs, it is hoped, will attract idealistic college students who would otherwise satisfy their impulses toward service in other ways. Yet such programs face a problem in giving their students any pronounced advantage over those without specialized preparation, for the current state of knowledge about instruction for the culturally deprived is very limited. Failing a pronounced advantage, those leaving such programs for work in slum schools are not likely to see the reality in a significantly different way from other teachers; the reality of slum school work is likely to affect them in much the same way it has affected generations of teachers before them. Yet such special training programs merit support. In drawing university personnel and abler students into a concern with inner-city problems, they could stimulate inquiry into those problems and result in more reliable and effective knowledge than we currently possess.

The National Teacher Corps supports specialized preparation for specially recruited young persons interested in teaching in the inner-city. Its fate is uncertain as I write—Congress may not appropriate funds for its continuance. The Corps is undertaking some interesting approaches to training teachers for work in slum school; the use of teams and experienced leaders is among the innovations featured in this program. The Corps, however, even if it survives, will not provide any substantial proportion of the teachers needed to man the schools attended by Negro and other disadvantaged children. Nor can the Corps intervene to affect the reality differences which exist between slum and other schools; it can help to recruit some teachers and experiment with different training approaches, but its authority over Corps members is extremely limited. Since it represents one of the few Federal attempts to assist with finding teachers for slum schools, it merits support, but it is not likely to make a major difference in the years ahead.

Proposals to increase salaries for those working in the inner-city constitute a frontal attack on the relative undesirability of such employment and, as such, deserve close attention. Such arrangements, however, contain difficulties of implementation which would require resolution in any attempt to use this approach to solve inequities in teacher distribution.

One of the difficulties with the salary approach lies in the subculture of public school teachers. The attitudes teachers hold toward financial

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inducements are complex and subtle. Individual teachers are loath to grant that money rewards played any significant part in their decision to enter teaching or, once in the occupation, to affect their selection of positions.[30] Nor is it easy to find an objective test of the potency of money differentials in teacher mobility, as higher salaries are generally associated with such other benefits as better working conditions, abler students, superior physical facilities, etc. To raise salaries for those who work in slum schools would mean the isolation of this factor of money income and would thereby make the decision to teach in slum schools a money-motivated act. I suspect that taking employment on purely monetary grounds would embarrass many teachers; the rhetoric and values associated with dedication are by no means dead among public school teachers. There are indications that some teacher associations resist this approach.[31]

The desirability of special salary inducements for slum teaching can be questioned on other grounds. Students in slum schools are, of course, predominantly Negroes or members of other sensitive minority groups. What would be the effect of defining work with such students as a "hardship post" requiring special compensation? Might such a definition act to reinforce the alienation, sense of apartness and inferiority feelings so often experienced by minority group students? Would the students come to see their teachers as having to be bribed to work with them? Should such a definition of the situation arise, it is not likely that salary inducements would add to the teacher's sense of overall satisfaction. Salary differentials for slum school teachers may hold promise as a shortrun solution, but considerable ingenuity would be required to prevent such an approach from backfiring with both students and teachers.

This necessarily brief review of current proposals for improving the distribution of public school teachers suggests a general conclusion. Although each proposal contains promise, in each instance that promise falls short of what is required. A more equitable distribution of teachers apparently calls for fundamental change in the allocative system; it does not seem to yield to piecemeal improvement. We should probably welcome any approaches that attract able teachers

[30] This statement is based on the author's research with teachers in the Boston Metropolitan area.

[31] I am indebted to Wesley Wildman for information on this mattter. Mr. Cogen, the new national head of the American Federation of Teachers, opposed differential salaries for New York City teachers while he served as president of the New York union.

to work with disadvantaged youngsters in the years to come. Yet there seems good reason to believe that a long-range and stable solution to this problem requires basic changes in the organization of our public schools.

II

The concept of the large educational complex serving youngsters of diverse racial and social background could provide genuine redress of inequities in the distribution of public school teachers.[32] By eliminating the neighborhood school, an institution which, by reflecting residential segregation, produces homogeneous schools, such complexes would remove the very basis of the invidious comparisons which now lie at the heart of the allocative system. Educational parks, in short, could mean the disappearance of that special dread of most teachers—the slum school.

The potential for equality that rests in educational parks stems from the fact that they represent a basic organizational change: being such, they will encounter resistance from some sectors of the American public. What of teachers? Is it not likely that they, sensing basic changes in their work world, will respond with opposition rather than enthusiasm? The data available on teacher attitudes depict them as uncritical supporters of the neighborhood school even where it contributes to racial segregation.[33] Educational complexes must gain the support of a certain proportion of teachers in order to succeed; teachers can, if nothing else, cause the failure of the concept by simply failing to apply for positions where such parks exist.

The idea of the educational park will not be translated into reality immediately in all American cities. It boggles the imagination to visualize large numbers of communities scrapping their existing plants to undertake an untried and unproved method of school organization. The possibilities in the concept must be tested and found real; whatever initial efforts are called, they will prove to be pilot projects for the

[32] This paper makes no distinction between educational parks, educational complexes, etc. Those terms are used interchangeably to refer to a large school drawing students from a wider geographical area than is currently found where neighborhood schools exist. The size could, of course, vary depending upon the circumstances, and although I have thought primarily in terms of a comprehensive school including elementary and secondary students, the concept can also be employed to refer to large specialized institutions.

[33] Coleman, et al., op. cit. See the tables on pages 169 and 170 where high percentages of teachers express a preference for neighborhood schools. The question asked, however, did not cite a clear alternative such as educational parks.

Nation-at-large. The issue of teacher response, then, is somewhat more manageable. Can a variety of teachers, including the ablest, be interested in working in the first wave of education parks? Will teacher reaction to the idea permit this approach a fair trial?

I believe the answer to this important question is "Yes, *if*." The "if" is critical in this abbreviated response. The purpose of this section of the paper will be to discuss factors which are likely to affect teacher attitudes toward educational complexes. Teacher resistance is, in fact, sufficiently likely to warrant answering the question posed above "no, unless." Any large-scale change involves costs, apparent and latent, for those who work within the affected organization; winning acceptance for change requires that perceived costs be offset by perceivable gains. It is essential, therefore, that we locate the bases on which teachers will object, explicitly or not, to the replacement of neighborhood schools by large "superschools" drawing students from a wider geographical area. Educational parks, once established, will be forced to compete with the well-established neighborhood school. Pilot educational complexes, whatever their merits, can succeed only if teachers volunteer to work in them and, having done so, are convinced that they are at least the equal of neighborhood schools. Unless that condition be met, we shall not be in the position to give the educational park concept adequate testing and appraisal.

The belief that educational parks can attract sufficient numbers of competent teachers for extensive pilot testing rests upon certain assumptions. Although they may be in a minority, there are various groups of teachers who, I believe, would welcome the chance to work in complexes. Such natural allies to the idea include Negro urban teachers, liberals in teacher ranks, those now in slum schools who do so for reasons of personal commitment and a significant proportion of beginning teachers enthusiastic about fresh and different approaches. The task of recruitment and inducement is to add enough "ordinary" teachers to this nucleus to staff the first educational parks; strategies for designing and operating such institutions must, therefore, take account of these "swing votes." More specifically, this refers to white teachers, and since high school teachers have already experienced schools with students drawn from larger areas and featuring internal diversity, the key group consists of elementary teachers. It is within that group that resistance is likely to be greatest; obtaining sufficient numbers of teachers to staff educational parks will require special efforts to convince

elementary teachers that educational parks constitute a desirable alternative to the system of dispersed, small schools they currently support.

A.

No matter how acute the analysis nor informed the discussion, it is impossible for us to predict in any detail, the myriad ways in which large school centers will differ from previous public school experience. Nor will any amount of planning by others, no matter how skilled and imaginative, provide those who will work in such schools with a sense of personal involvement in their development and functioning. The design and creation of educational complexes will require a plethora of specialized talents, but as far as its acceptability to teachers is concerned, none will be as important as the teachers themselves. Specific arrangements for teacher participation can and should vary from community to community, but the principle of such participation, seriously implemented, is vital to the fate of the educational park concept.

There are those who will resist teacher participation, arguing that their inclusion will stifle the emergence of adventuresome plans. It may well be true that the larger the circle of participants, the more difficult it is to win acceptance for novel, untried ideas. Yet the design of a school is one thing, and its operation another. Teachers, who possess enormous, under-the-counter veto power, could readily subvert plans they did not believe in by token acceptance and informal rejection. Plans to urge the creation of educational parks, therefore, should contain provision for serious, sustained and influential participation by teachers in their development. To attempt imposition of such plans on teachers is to risk their rejection by persons whose cooperation is absolutely essential to their realization.

B.

The fact of novelty can, under certain circumstances, generate excitement for a proposed change; educators tend, somewhat inaccurately, to refer to the attendant enthusiasm as "Hawthorne Effect." Educational parks have characteristics which could evoke such response among those within teaching ranks; they will, presumably, be impressively designed, large-scale, attention-getting structures incorporating the latest advances in educational design and teaching facilities. School administrators will have much to dramatize both in the idea itself and

in its basic high purpose—the provision of quality education for all. Undertakings of scale can generate psychological momentum and it seems likely that many teachers, including, one suspects, abler ones, would be attracted to well-conceived educational parks.

There are dangers, however, in an unbridled emphasis on the educational complex as large-scale innovation. The wish to start everything all at once should, I believe, be curbed, for it could, if given expression, induce resistance to the concept of the educational park. There is risk, in other words, of an innovation overload. Teachers who might, admittedly with difficulty, accept the concept of a large and internally diverse school might refuse to support revolutionary (to them) instructional changes. To lay excessive stress on instructional innovation might, in fact, serve to help those who wish to rationalize fear of integration or fear of change in work patterns. The educational complex is, in and of itself, a major innovation. In one fell swoop, it issues a direct challenge to the "cozy" local school and its covertly valued (by many) patterns of racial segregation. Our culture gives strong support to such a challenge (e.g. the feature of comprehensiveness in high schools is advanced on the basis of its functions of social integration), but it would probably be overly optimistic to expect that idealism could carry the twin burdens of major social and instructional change.

Instructional innovation brings costs and anxiety to classroom teachers. Like skilled craftsmen, teachers accumulate specific skills and habitual ways of responding to classroom issues. Regardless of how an outside observer may assess that level of skill, the individual teacher cannot but prize his or her unique kit of techniques and behavior patterns, for they are the closest to capital possessed by the teacher. Innovation, particularly where it moves teaching toward a more production-oriented, engineering-like conception, threatens that capital with rapid depreciation. Teachers reiterate their belief that teaching style is a very personal matter, something that requires integration into one's self, something that is not easily transported, without adaptation, from one person to the next. Thus may teachers be uncertain about their capacity to adjust to change.

Is there contradiction in pointing, simultaneously, to the appeal of the novel and the craft conservatism of teachers? Not, I believe, if it is understood that while teachers resist the imposition of new work patterns they may, and do, value the opportunity to innovate where they believe it will better accomplish their goals. Many teachers express

skepticism toward the idea of others devising innovation for them; they seem to see such "fads" as, among other things, maneuvers by self-interested administrators seeking attention. It is likely, in fact, that some administrators innovate (perhaps unconsciously) in order to get at least temporary privileges of direct initiation for teachers; without change, days and weeks may pass without administrators finding a legitimate opportunity to intervene in their subordinates' work. Teacher conservatism rarely rests upon the conviction that the best solution has been found—few teachers possess the arrogance such a conviction entails. What teachers feel, it seems, is that they are best equipped, as individuals, to pass on the merits of a different way of doing things; the test, for them, is in their classroom with their students. When changes "work" there, they are espoused; when they do not, they are rejected.

Teachers might well oppose plans for educational parks, then, which stressed, as a precondition of participation, a readiness to accept a large number of (personally) untested practices. Yet many teachers would welcome the opportunity to observe and think about novel and divergent approaches to classroom activities. Those considering the design of parks, therefore, would be well advised to create maximum opportunities for teacher innovation without prescribing their specific nature. Such an approach suggests the usefulness of flexible construction, financial support for a variety of equipment needs, and the provision of specialized assistance for those undertaking new challenges. Educational parks designed to encourage teacher opportunities for innovation will prove attractive where the imposition of new instructional approaches would repel.

C.

The educational complex involves two major types of change for teachers, and these are particularly marked for members of elementary school staffs. The first is the replacement of small, dispersed units by a collection of units in a central location, a shift from simple to complex organization, from intimacy in setting to the possibility of impersonality. The second series of changes revolves around racial and socioeconomic integration as relatively homogeneous student bodies are replaced by heterogeneous ones. What costs, of a psychological nature, might be entailed in the first set of changes? Can they be offset by adjustments in the plan for educational parks?

The prospect of large and complex organizations may make teachers anxious about the maintenance of personal identity and cause them to worry about the disruption of relationships they currently enjoy. Elementary schools, for example, currently feature a limited set of roles; there is a principal, fellow teachers, secretaries, custodians and students. Simpler organizations, though never quite as simple as they may seem, are more readily managed by individuals than larger ones with more complicated combinations of role relationships. The individual teacher, moreover, can be better known within such a "village"; the teacher's orbit is local and limited, but a stable, simple organization can provide a definite position, a clear reputation for competence or other qualities. Teachers develop a stake in their local reputation—the possibility that the village will give way to a city threatens that ounce of fame.

Teachers may fear that a shift to larger units will threaten their key work rewards. The nature of teacher rewards is such that some degree of autonomy, some day-to-day exercise of personal judgment, is necessary for their realization. Teachers today possess practically no formal autonomy, but the experienced and trusted teacher may in actuality enjoy considerable protection from the intervention of colleagues, administrative superiors and parents. Dispersion of school units means physical separation from central authority and many principals, barring trouble, are given leeway in their daily work round. Principals frequently choose to supervise lightly, and the compliance they exact may be restricted to general rules of the school and minimal specifications for instruction. Thus the teacher is left to rule her room with relative impunity. Teachers now possessing this fragile but real freedom may perceive a large complex as a direct threat to their freedom; proximity to higher authority may be seen as dissolving liberties based on physical distance.

Although the literature on educational parks is still somewhat general and undeveloped, some exponents of such schools stress the desirability for subunits within the overall organization. Consideration of teacher anxieties highlights the crucial nature of this question of internal organization; to attract and hold teachers, educational parks *must* consist of distinct and stable units of limited size and complexity. Such subunits can and should be interrelated for specific purposes, but their import must be unquestionable and their distinct identity readily perceived. Teachers who are accustomed to the relative inti-

macy and freedom of a well-conducted neighborhood school will be loath to leave it for a vast and undifferentiated establishment. But teacher participation could mean that plans to develop the complex as a series of distinct units will become generally known and understood. Teachers should be involved in working out the division of functions and responsibilities for the separate and overall units; such participation will permit them to protect vital interests which are currently unprotected by formal rules.

Subunits would fulfill a variety of needs for teachers. Such smaller schools would, for example, permit certain regularities in student placement where these seemed desirable to staff members. Teachers who care deeply about their individual rooms (there are such in the elementary school) could visualize space which is theirs to decorate and use as a base of personal identification. Small subunits would enhance the personal recognition of teachers who work within them. Social relationships within the smaller units might continue to be informal and intimate; the existence of separate units could serve to block excessive tendencies toward bureaucratization. It might, in fact, be wise to follow a kind of Oxford plan where each subunit is named and encouraged to develop a particular identity. Whatever specific arrangements are worked out, however, it is clear that educational parks, to prove attractive to teachers, must be organized to achieve a considerable degree of continuity with present work arrangements. The subunit holds the greatest promise for ensuring that outcome.

Teachers today show increasing concern for a more active and responsible role in decisions that affect instruction. Responsible participation would, I believe, increase the overall effectiveness of schools and contribute to the professional development of public school teaching. It is likely that the autonomy which gets expression in the governance of instructional affairs is a more constructive force than the autonomy of the closed door; it leads, among other things, to greater faculty awareness of the total goals of the school and their part within it. Small subunits enhance teacher participation by keeping decision-making groups small. Enough has been said, I trust, to illustrate the major point that educational parks should not, under any circumstances, be designed as monolithic bureaucracies. The possibilities they present for meaningful teacher participation in the governance of instruction may prove to be among their most attractive features.

D.

There is no panacea for overcoming racial prejudice. It is quite likely that some teachers will never choose to work in racially integrated schools, in the North as well as the South. Those with strong racial antipathies are no loss to those who would establish educational parks; in fact strenuous efforts should be made to screen out teachers whose basic attitudes are antieducational for Negro (as well as white) children.

Some teachers, however, fear the prospect of working in racially integrated settings primarily because it is new and different. Whatever is known about the effective management of racial integration should be used in introducing such teachers to this new experience; the issue is too critical for educators to indulge in any squeamishness about head-counting, quotas and the like. Realistic strategies will be required and these will demand that administrators face up to people's feelings about race. There will be times when concessions will have to be made in the interests of long-range racial harmony, and administrators of educational parks will have to be given latitude in making the best decisions they can in this area of sensitive human relationships.

Some teachers will fear integration because they hold a stereotype of the Negro student, a "blackboard jungle" type of image. They have heard about schools where knives flash, teachers are attacked and girls are pregnant before their teens. Such fears are not without their grounds, for such schools do exist today. The point is, however, that teachers must come to disassociate that image from the integrated, well-conducted educational park. Steps will have to be taken to allay such anxieties both before and after teachers work in educational complexes.

As large and diverse city schools, educational complexes will require special attention to questions of control and discipline. This is no simple matter, as some educationists would have us believe, of providing "a child-centered curriculum" or "interesting teaching that eliminates discipline problems." Such bromides should be eschewed in modern educational planning. Specific and effective steps will be needed to police students in schools which seek to mix persons of widely varying social backgrounds. It would be unwise to throw the major burden for such control on individual teachers.

We have yet to learn how effective staffing of city schools will affect discipline but the addition of numerous adults in diverse roles should

help to achieve greater control. Administrative officials should be sufficiently numerous and trained well enough to deal, continually, with problems as they arise. The generalist conception of the teacher as responsible for all facets of student behavior should be replaced, and expectations about teacher's tasks in the disciplinary area changed. The school should be so structured that when student behavior interferes with instruction, the teacher is free to request and receive immediate and effective assistance. Provision of such disciplinary support will cost money and points to the need for an adequate financial base for the successful operation of large and diverse city schools.

Heterogeneous school populations will force other issues to the surface. Although the norms which currently govern teacher assignments are largely informal, it appears that most faculties develop strong expectations that equity will prevail in the distribution of responsibilities. More diverse schools will create possibilities for greater inequities, at least in teacher perceptions. Since such allocations are a likely source of difficulty, the wisdom of teacher participation in anticipating them is evident. Full use of group process professionals is indicated where feelings involve such difficult matters as race and children of impoverished background; the human preparation of teachers for educational complexes should be treated as a major necessity.

Experience offers some encouragement, however, on the retention of teachers in integrated schools. Much of the flight of white teachers is associated with the rapid and near-total replacement of white by Negro students; residential segregation has meant that few neighborhood schools approached an even distribution of the races. Where such a balance is found, however, we can also find integrated school faculties. This suggests the rather obvious point that educational parks, to attract teachers of both races, must be genuinely integrated. To achieve a viable balance, great care will be necessary in selecting appropriate sites for such schools; they should, of course, be located to avoid the taint of the ghetto or the strain, for Negro students, of moving into a strange white area. School officials should be provided with sufficient funds and other resources needed to make good decisions on the location of educational parks. Such decisions will require careful demographic analyses, surveys of community real estate practices, surveys of homeowner intentions and the like. Great care is necessary lest a site be chosen which, although initially appropriate, is subsequently rendered inappropriate by shifts in the residential distribution of Negroes and whites.

E.

Introduction of a new type of organization offers opportunities for adding to the attractions of the public school teacher's role. The break with the past introduces new elements of freedom; there are, as well, certain advantages associated with larger size. A few suggestions should serve to illustrate some of the possibilities present in a shift to educational parks.

There is a major drawback, for teachers, in the current organization of schools. Although the neighborhood school is indeed "cozy," it is often a lonely place to work. Teachers complain that their daily round is an isolated one; the absence of sufficient daily contact with a variety of adults leads the list of costs teachers attribute to their occupation.[34] The concentration and proximity of many adults characteristic of an educational park approach offers hope of overcoming this particular problem. The teacher could be freed from her constant responsibility for students (this is particularly so for elementary teachers) through the use of permanent substitutes made possible by gains of concentration. Economies of scale would permit the construction of facilities for teachers, such as special dining rooms, libraries, recreational areas, etc., which would enlarge opportunities for daily interaction. Teachers could be freed to visit their colleagues at work; current arrangements give the individual teacher little opportunity to learn from others as they teach. Enlargement of the teacher's daily contacts would be pleasant and profitable—it could produce greater professional stimulation.

Small schools, ironically, provide neither sufficient adult contact for teachers nor sufficient opportunities for privacy; teachers may have no place where they can work, uninterrupted, on lesson planning, reviewing papers or, quite simply, taking a needed rest. Designers of educational parks could take this opportunity to build in this needed resource of private space; offices for teachers might be considerably more than we would expect for the dignity and prestige of that critical occupation.

Economies of scale have their counterpart in the concentration of human resources. Large complexes should permit the more effective use of highly specialized personnel to assist teachers in particular aspects of their work. Current arrangements for systemwide supervision are rarely adequate; one difficulty is the time and effectiveness

[34] In research in process by the writer. This tendency is particularly marked among women—it is they who are most likely to lament the fact of isolation. Effective correction of this difficulty would act, therefore, to attract elementary and secondary women to the educational park.

lost through travel from school to school. Most elementary teachers, for example, doubt their competence in music and art—they would welcome specialists to teach those subjects. High school teachers state their readiness to have guest lecturers on areas they know least well. Highly specialized teachers could be pooled and used more efficiently in large parks.

One of the banes of the teacher's life is the constant and tedious clerical work he or she is required to do. Large centers, justifying the cost of a computer, could be organized to minimize the actual record-keeping and computation expected of the classroom teacher. Any reduction of this aspect of the teacher's workload would be more than welcome; freedom from clerical routines would be a significant attraction.

A final comment on the design of educational parks and the issue of attracting and holding teachers. One of the strengths of the complex idea lies in its potentialities for economies of scale. There is the danger that proponents, eager to gain acceptance for the park approach, will overemphasize the "bargain" aspects of such schools. Yet it must be noted that certain tools which are important to teachers will *not* be less expensive. Quality books in sufficient quantity, audiovisual equipment, laboratory equipment, and other moveables will not be cheaper because they are located in educational parks. The tools the teacher uses on a day-to-day basis effect his or her feelings about the school and the job; it will not pay to skimp on such facilities. Should that occur, teachers will more than likely conclude that the educational park is another attempt to coat the pill of inadequate city school facilities.

III

It is ironical that the educational complex, a form of school organization that can further instructional innovation, requires conservative introduction. But prudence is warranted for reasons other than the need to attract teaching personnel. Although there are several potentially important innovations in sight today, time will be needed to assess their merits and to refine them for regular use in schools. Some major innovations, such as computer-assisted instruction and programed learning, require scarce skills and knowledge for development, application, and training others in their use. It will take time to build a core staff of persons to lead in the anticipated changes in instructional practice.

Educational parks, through economies of scale, will facilitate innovations which call for expensive capital equipment. A less obvious advantage is sociological and stems from the concentration of people envisaged in the complex. As in the city, a denser population leads to greater variety in human relationships and greater diversity in the creation and flow of ideas.[35] Cities, not villages, spawn civilizations; choice among alternatives and cultural riches occur where ideas and persons mix freely in diverse relationship. Thus the educational complexes, if properly used, could produce a higher culture within the school. In this section, we shall concentrate on the issue of quality and explore the possibility that educational parks, in addition to providing greater equality of educational opportunity, may also result in higher quality instruction for city students.

A.

The design for the educational park could include an internal "laboratory school" aimed at sparking improvement in all phases of instruction. This pace-setting unit could be staffed by persons who possess scarce expertise in a variety of subjects and instructional approaches. It might, for example, include persons who can write programs for computers and instruct teachers in how to use them. Specialists in various subjects, from history to physics, could be available to work with teachers. Teachers and students, furthermore, could be rotated through the laboratory school for limited periods of time. Teachers could gain experience, with the assistance of specialists, in learning and applying new techniques of instruction. Students could participate, for brief periods, without serious loss to their regular programs of study. Thus could a regular mechanism for improving instruction be made part of the day-to-day life of the educational park teacher; it is this sort of advantage which lies in the concentration of resources found in a complex organization.

A system of internal training and innovation should permit teachers control over the rate at which they make changes in their work.[36] A park with subunits marked by considerable autonomy linked to a

[35] This idea is fully developed in the writing of sociologist Robert Park. See Park, Robert E., "Race and Culture" (Glencoe, Ill.: The Free Press, 1950). Especially pt. I.

[36] In a study of teachers in the Dade County, Fla., public schools, conducted by the author, the majority were critical of the speed with which innovations were introduced in that system. There were teachers who accepted the desirability of change yet objected to specific changes because of the rate at which they were introduced.

central laboratory school would meet this need; teachers, as they come to master and respect a new technique, could introduce it into their regular assignments. Initial work on their part would, of course, be based on the approaches already mastered; the chance to learn new approaches by doing, coupled with a flexible physical plant and an atmosphere conducive to innovation, would facilitate voluntary decisions by teachers. Such a system would not be based on coercion, and teachers would use techniques only as they decide to do so. This approach has an additional advantage; it would provide curbs to offset any excesses induced by the natural enthusiasm innovators have for their product.

Organizational pluralism, represented by a congeries of subunits, is well-adapted to the initiation and retention of diverse approaches. Subunits could be so organized as to emphasize different techniques in different mixes; such divergence, by broadening the possibilities open for any given student, would enrich the instructional resources of the school. Counselors could decide what mix of instructional approaches, social setting, etc., is best suited to the individual child; the standardization now current in schools could be replaced by a closer linkage of individual need to specific program. Sensitive counselors could, as well, use the options before them to prevent the resegregation of children that some times occurs in the form of ability groupings. Diverse approaches also facilitate research, for they permit comparison and evaluation of the effects of input-output relationships. Practices which proved generally effective could be put into practice as part of the common core of the educational park, and a beneficial cycle of differentiation, assessment, diffusion and further differentiation, etc., could be brought into play. Nor need we assume that different parks would decide on common approaches; creative laboratory schools, situated near different university influences, etc., might well prove variegated.

The educational complex could contribute to more effective ties between city schools and other cultural institutions. This possibility can be illustrated by citing the case of school-university relationships.

Recent years have seen greater emphasis on linkages between universities and schools; much of the innovation being undertaken today has, in fact, resulted from such cooperation. Yet those in universities face a problem in working with school personnel, for direct contact, given the dispersal of neighborhood schools, forces the professor to

work within a small orbit. It is not clear, moreover, that successful efforts in one part of the public school establishment will be communicated to other sectors; promising undertakings may fail to receive attention simply because of inadequate communications among schools and school systems.

Larger school units, as represented by the educational park, could improve this aspect of university-school relationships. Time spent on matters affecting the entire complex would involve thousands of students; there would be no problem of limited impact. Internal arrangements which facilitated the diffusion of effective practices would also prove attractive to the university developer. He would be reassured to know that teachers in the complex at large would have opportunities to observe and try out the approaches he has in mind.

The possibility of immediate access to a large body of students located on one site, coupled with effective arrangements for internal communication, would facilitate relationships not only with universities but with museums of art and science, television stations, government bodies, newspaper offices, industry, etc. Such ties to our culture at large could broaden the prospective of teachers and students in ways which do not occur in a system of isolated and dispersed neighborhood schools.

B.

Instructional innovation may affect more than the students who receive it—it has a way of changing teacher roles as well. This process and some of its implications can be explored by reviewing specific innovations and their likely effect on the tasks and relationships of the public school teacher. I shall discuss three such innovations: (1) the ungraded school, (2) computer-assisted instruction, and (3) team teaching. It is too early for us to have research evidence on the effect of these changes; what follows is prologue to needed inquiry rather than the outcome of systematic study.

Ungraded schools may be organized in a variety of ways but they share the common objective of freeing students and teachers from automatic classifications and learning sequences based, primarily, on the age of the student. The goal is to bring the student's activity in school closer to his personal needs and actual development. All ungraded approaches, no matter what the specifics, require close and accurate observation of individual students and sensitive decisions based

on that observation. Staff members are forced to "see" the individual child and to assess his unique nature and situation. The value of the approach hinges on the quality of those decisions; unless they are effective, the ungraded school offers slight advantage over more routinized forms of instruction.

Loosening the constraints imposed by age-grading does not, in itself, result in a major change in the teacher's role. But the continual need to make decisions about individual children, decisions which are often difficult, can induce changes in the teacher's attitude. Needing more and better information on which to base decisions, the teacher may be readier to learn what others have observed and how they have interpreted their observations. The psychologist's test, for example, may be seen in a different light as the teachers seek a firmer base for complex decisions. The outcome can be more mutual consultation among teachers, and closer working relationships with persons of specialized competence.

By focusing on individual students and encouraging greater collegiality among teachers, ungraded schools move teaching toward a more professional type of role performance. Routine "solutions," based on the needs of a group, are replaced by hard thought about individuals, isolated judgments by visible decisions, the lone practitioner by consulting colleagues. One finds similar shifts as one moves to the higher quality hospitals, law firms and architectural offices; reflective action in a context of colleague visibility is probably the hallmark of quality professional service.

Ungraded approaches may also lead to closer observation of the effects of teacher decisions, for specific approaches used to deal with specific problems are more visible than general pedagogical styles. Techniques which increase the specificity of teacher self-evaluation will advance the quality of instruction over time; visible failure is a prod to better performance. The long-range effects of ungraded arrangements will probably include deeper preparation in the behavioral sciences as teachers seek better backgrounds for making human decisions. Preparation programs for teachers will probably respond, should ungraded schooling become sufficiently general, by including more experience in the disciplined observation and analysis of children.

Computer-assisted instruction, as yet in an early stage of development, has enthusiastic proponents who predict great potential for ad-

vancing individually oriented and self-directed learning.[37] Should such predictions prove valid, the computer could have serious effects on the role of the teacher. The balance of collectively oriented versus individually oriented efforts would be tipped, presumably, toward the latter. Students would spend considerably greater proportions of their time working alone, and the proportion of teacher to class-as-a-whole interactions reduced. Some expect that computers, in addition to providing practice with ideas, will take over much of the initial conveyance of basic information. Should this occur, the teacher's role would move from the leadership of a group to an emphasis on a series of dyadic relationships with students.

Much remains to be learned about the possibilities in computer-assisted instruction and the limits that might constrain its usefulness in schools. Its potential appears to lie, however, primarily in the cognitive domain and, within that, in particular types of learning.[38] Like any machine, it can operate only with ideas which can be communicated through standard symbolic systems; there is much that happens in teaching and learning which is beyond the reach of such condensation. For computers to replace teachers would require a considerable shift in our conception of what constitutes an education.

Yet computers, if effective, will provide experiences currently conducted by teachers; their widespread use would therefore involve changes in the teacher's role. My own guess is that teachers would move toward greater emphasis on motivating individual children and assisting those who encounter difficulty; such a change in emphasis would, in all likelihood, benefit those children, often from disadvantaged homes, who currently fall behind. The overall effect would be to stress individualistic aspects of the teacher's work; as in ungraded instruction, there would be a greater propensity for teachers to ask, "How can I help this particular child?"

It would not be long, were computers to take over any significant proportion of the teacher's tasks, before gaps in our knowledge would become painfully apparent. Detailed knowledge about how individual students learn or fail to learn particular things is very limited; what we know today falls short of providing an adequate base for teachers who can spend a high proportion of their time with individual stu-

[37] I wish to thank Robert Rippey for useful ideas on prospects for computer-assisted instruction.

[38] This idea has been stimulated by reading an unpublished paper by Philip Jackson.

dents. Teachers currently orient most of their teaching to groups of students; chances to become deeply involved with the learning problems of single students are scarce, to say the least. Should tutoring become the main work of the teacher, puzzlement and tension would probably arise. The short-range result would be painful for teachers and those planning the more-than-casual use of computers should be prepared to deal with such difficulties. Yet the long-range outcomes, given the availability and sophisticated use of research resources, could be more solid and effective pedagogical knowledge than we currently possess.

It probably will be some time before any considerable number of teachers, in educational parks or elsewhere, work alongside computers. There is considerable development work needed, and such work probably will be undertaken by specialists in business organizations and universities. Diffusion of computer-assisted instruction will require changes both in the preservice training of teachers and in inservice programs. Teachers will have to know their subjects better to analyze its content and translate it into computer operations. They will obviously need familiarity with the operation of computers and the languages they understand. Greater emphasis on tutoring will suggest better understanding of the dynamics of individual personalities. The dynamic nature of computer technology, on the other hand, will result in rapid obsolescence of preservice training, for libraries of programs will proliferate, new languages be developed and techniques refined. Computerization of instruction will require inservice efforts that are intense, continual and effective. Any attempt to project economic costs involved in the use of computer-based instruction should include considerably greater expense for the training and retraining of school faculties.

Some form of team teaching may prove useful to those designing and implementing educational parks. The use of aides, the need for consultation stimulated by ungraded arrangements and, indeed, change in general, point toward new combinations of staff members. I shall make a few comments here on how team teaching might fit into the educational complex; I have dealt with team teaching as such in another place.[39]

[39] Shaplin, Judson and Olds, Henry, editors, "Team Teaching," (New York: Harper & Row, 1964), ch. 9.

Team teaching provides a vehicle for the induction of beginning teachers, and such initiation, given a more complex, technically advanced school, will increase in importance. The likelihood that colleges and universities preparing teachers will lay greater emphasis on both subject matter mastery and the behavioral sciences has been mentioned. The professional preparation of teachers, therefore, may move in the direction found in highly established professions—the actual skills involved, rather than being taught in the university, may be learned at the place of work. Team teaching, with its delegation of simpler tasks to beginners working under experienced practitioners, offers a way to improve the mastery of work skills.

The isolation of teachers in separate schools and, within them, separate classrooms, has inhibited the development of a refined "technical subculture." But as team teaching calls for more frequent interaction and more precise coordination of effort, communicative needs will arise and with them, recognition of the need for a more precise rhetoric of teaching. The development of such a common language could result in more codification of effective teaching practices and, through time, more rigorous assessment of working assumptions.

We have reviewed the possible effects of three innovations, likely to occur in educational parks, and likely, if our speculations prove accurate, to stimulate new and different levels of teaching performance. Ungraded approaches, computer-assisted instruction and team teaching all contain possibilities for the professional development of the teaching occupation. Inasmuch as more reflective, scientifically oriented, and collegial teachers will prove more effective, such innovations, supported by the characteristics of the educational park, will add to the quality of instruction available to children in our cities. Imaginative use of the educational park approach, therefore, need not sacrifice quality to equality; the challenge facing schoolmen is to increase both the distribution and excellence of public school instruction.

IV

A brief summary seems in order. This paper began with consideration of current inequities in the distribution of public school teachers. I took the position that such inequities are rooted in the great discrepancy between slum and other schools. Review of current proposals to improve teacher distribution strongly suggests that effective change

will require more than improvements initiated within the existing system of small, dispersed schools. It does not appear possible to attain equality of opportunity, as far as teaching is concerned, within the constraints imposed by the neighborhood school system.

Examination of a major organizational alternative, the educational park, reveals that it is likely to produce resistance among some public school teachers. I stated the opinion, however, that given certain conditions, enough teachers could be attracted to undertake pilot projects in our cities. The conditions are vital, and statesmanship of a high order will be needed to administer the shift from neighborhood schools to educational complexes. Yet the educational park approach offers what other proposed solutions do not; it could result in a just and equitable distribution of teachers for Negro students and members of other disadvantaged groups.

I discussed the possibilities for innovation that lie within the educational complex idea. Economies of scale plus the concentration of resources facilitate innovation; some suggestions were made on how voluntary teacher decisions to undertake new approaches might be encouraged. Large centers would also improve relationships with other cultural institutions. Consideration of three specific innovations reveals that given appropriate implementation, these innovations could increase both the attention received by individual students and the general level of teacher performance. Inasmuch as such changes can improve the quality of instruction, the educational park promises such improvements for students in our cities.

Desegregation Techniques

(This paper was prepared for the Commission by Dr. Neil V. Sullivan, Superintendent of Schools, Berkeley, Calif.)

Educational leaders, particularly in the cities, are increasingly coming to recognize *de facto* segregation as the most pressing problem with which they must come to grips today. This recognition is in itself progress. Until recently educators generally felt that segregation was not their problem—that their problem was simply to provide the curriculum required for whatever students happened to show up at a given school. There remains today a powerful rear guard of school officials who are still fighting that battle. However, they are now finding themselves forced to get into the subject of racial composition of schools whether they think it belongs in their domain or not.

Fortunately an ever-growing number of school officials are recognizing the positive educational implications of integration and they are voluntarily moving into the vanguard of the struggle to end all forms of segregation—*de facto* as well as *de jure*. We thus find a still small but growing number of educators who, instead of waiting until they are forced to move grudgingly by pressure from civil rights groups, are working closely with these groups and all segments of the community to attack this common problem. In this type of individual of "goodwill"—both lay and professional—lies our best hope for solving the problem.

Segregation has long been one of my major concerns. During the almost 20 years I have served as a superintendent of schools, I have been privileged to take part in many endeavors aimed at coming to grips with problems of segregation—both *de facto* and *de jure*.

I was privileged to serve as the Superintendent of the Free Schools in Prince Edward County, Va. These schools were reopened by the Kennedy Administration as private schools after the public schools had been closed for 4 years by county officials in defiance of the U.S. Supreme Court's *Brown* decision.

As a superintendent of schools at Long Island, N.Y., I worked with neighboring school superintendents and boards of education with the support of the dynamic State Commissioner of Education, James E. Allen, in an attempt to integrate the schools of this massive suburban

area as the Negro population pushed out from Harlem, Brooklyn, and the Bronx.

I have served as an educational consultant in several major cities and for the Model School Division in Washington, D.C. Here we used a myriad of compensatory educational programs and innovative techniques designed to provide remedial help and stimulation for the Negro child in an attempt to make up for ghetto school conditions. I came away from Washington as I did from the other American cities where similar efforts had been made, knowing that while the efforts were commendable, the end result would still leave the individual Negro child several years behind his middle-class brother attending schools outside the segregated Negro area.

I am now starting my third year as Superintendent of Schools in Berkeley, Calif., where I have enjoyed unparalleled success in desegregating segments of our public school system. This success still falls far short of what is needed if we are truly committed to a program of quality education for all American children.

I have observed with deep regret the forced retirement of competent educators and superintendents who could not solve the multidimensioned problem of school integration despite the best of intentions and firm resolve. Some of my colleagues made valiant efforts using different administrative techniques and still failed to come up with programs that were satisfactory to the citizenry. Others, because of personal bias or recalcitrant board members, never made serious efforts to solve the problems. Few American cities with sizable minority populations have escaped the problem. A highly respected colleague, Calvin Gross, was dismissed after trying for 2 years to come to grips with the problem in New York City. Militant civil rights groups staged massive demonstrations in Chicago demanding the dismissal of veteran school superintendent, Benjamin Willis. Elected officials in San Francisco asked the incumbent superintendent of schools Harold Spears, newly elected president of AASA [American Association of School Administrators], to retire early. Samuel Brownell, superintendent of schools in Detroit, had serious problems in Northern High School and militant civil rights groups were pleased that he was retiring in August 1966.

The "approach" used in attacking the problem must of necessity vary from community to community. Most of the major cities of the country will face problems of distance. Many cities will find it neces-

sary to overcome traditions that run counter to racial integration. Educators in all communities will find their efforts toward solution of this problem complicated by other aspects of the community life (e.g. housing segregation) over which they have little, if any, control. There are no pat solutions that can be applied universally. Although cities have much to gain by taking note of experience gained in other communities, each must solve its problems in the light of its unique situation.

Criteria for Solutions

Although cities will vary in the way in which they attack the problem and in the details of the solutions they develop, their approaches must meet certain criteria if their solutions are to be genuine. These criteria include the following:

1. Segregation must in fact be ended. This point should be self-evident. However, in too many cases the so-called solutions developed represent token gestures toward racial balance but do not wipe out *de facto* segregation. It may not be possible to wipe out *de facto* segregation totally overnight, but a community must accept the fact that tensions will continue and the problem will not be solved until this result has finally been achieved.
2. Desegregation must be combined with a general program of educational improvement. It is not enough simply to mix youngsters, many of whom come from a background of educational deprivation. These children must be given special help to overcome this deficit and to succeed in the new environment. Also large segments of our communities, unconvinced of the educational necessity for integration, must be shown that the new program is in the best interests of all children.
3. The "solution" to *de facto* segregation must involve the *total* community. No area of the city must be made to feel that it is being picked on or sacrificed to solve a total community problem. The experience of my own city is an example. A proposal made by a citizens' committee to achieve desegregation by redistricting junior high school boundaries met with a storm of protest in one area of the community that felt it was being sacrificed to solve a citywide problem. When, in the course of

community deliberation, another plan was substituted, providing an even greater degree of integration and involving *all* areas of the city, the community accepted the proposal. This criteria also means that Negroes cannot be asked to bear the total brunt of the drawbacks (e.g. long distance travel) accompanying desegregation. *De facto* segregation is a community-wide problem and must be solved on a community-wide basis.

4. Educators in working toward the solution to the problems of *de facto* segregation must act in good faith, and build the confidence of the community in that good faith. Unless such confidence is built securely, educators risk being considered antagonists and too often are denied the time and community cooperation needed to prepare programs for solving the problems.

Any program designed to combat the evils of *de facto* segregation must be examined in the light of these criteria. With them in mind I turn to the more common approaches that have been used in various places as antidotes to the problems of *de facto* segregation.

Proposed Solutions

Open Enrollment

One of the most common attempts to combat *de facto* segregation is through some form of "open enrollment." Basically, this approach permits students who would normally go to one school to go to another one provided there is room. In general, this plan involves permission for minority students in segregated, low-prestige, minority schools to occupy vacancies in higher prestige Caucasian schools in other parts of the city. Although transfers in the reverse direction are sometimes permitted, it is extremely rare that a significant number of them result. Usually the transfers are voluntary. Districts having open enrollment vary in their practices concerning transportation of the students: some districts provide it; others leave it as a responsibility of the parents.

Open enrollment, if combined with a program of general educational improvement, can be helpful as a first step in the direction of integration. However, it is totally inadequate as a long-range solution to the

problem. Through open enrollment, a start, token though it may be, can be made in bringing integration to erstwhile Caucasian schools. This can be beneficial both for the students being transferred and for the students already enrolled in the receiving school. Likewise, the reduction in enrollment in ghetto schools which results from this kind of program can make it possible to reduce class size and thereby improve the educational program in those schools.

Furthermore, as a first step in integration, open enrollment has the tactical advantage of being very difficult to oppose, since the opponents of integration are more apt to be in the receiving schools. It is very difficult for them to think up "acceptable" reasons for opposing the move since their own youngsters are not being moved anywhere. They are placed in the position of having to come right out and say that they oppose it because they do not want their children mixing with Negroes or keeping quiet altogether.

Minority students whose parents are willing to have them transfer out of their neighborhoods to Caucasian schools are more apt to be students who believe in integration. Hence, both in appearance and conduct they can be expected to make friends for the cause of integration and to help break down resistance based on lack of association across racial lines.

The experience of Berkeley elementary schools, in a program financed by the Elementary and Secondary Education Act, illustrates both how open enrollment can be used as an initial step in the direction of integration and how it falls short as an ultimate solution. Although we had already desegregated our secondary schools the year before, the elementary schools remained substantially segregated. We established as our first priority in use of ESEA funds, the reduction of pupil-teacher ratio in the four predominantly Negro south and west Berkeley schools. A reduction of class size gave us an average of about 230 students in these four schools. We found that we had spaces for 230 youngsters in the schools (mostly Caucasian) in other sections of the city. With ESEA funds we purchased buses and transported students to the receiver schools. This program was voluntary. No students whose parents objected were moved. Although there was some grumbling, and I suspect even more latent opposition, opponents of this plan were hard pressed to find grounds for opposing it publicly without appearing to be racial bigots. Hence most of them kept quiet. The actual transfer was preceded by careful planning of transportation, and preparation

of the youngsters and their parents (those being transferred and those in the receiver schools). Despite a few minor problems apt to accompany any new program, the experience was overwhelmingly successful and the program helped to reduce hostility toward desegregation.

We were careful, however, not to build this program up as the answer to elementary school segregation. We stressed its connection to a general program of raising educational levels all over the city. Most of our ESEA funds were spent to provide more teachers and other staff members in the south and west Berkeley schools. The program did achieve limited integration in the receiver elementary schools. However, in terms of numbers this integration was token. It did nothing to end segregation in the sending schools. Although these schools obtained the benefits of an improved educational program and reduced class size, they remained as segregated as before. Many Negroes who supported our transfer program are now raising the question of when Caucasians are going to be bused down to their schools. I expect this kind of inquiry to become more insistent and for parents whose children are not included in the open enrollment program to object to having to send their children to segregated schools. We do not consider that we have solved the problem of elementary school desegregation.

The city of Baltimore is another example of the strengths and weaknesses of open enrollment used for desegregation. In 1954, soon after the famous Supreme Court ruling, Baltimore abolished *de jure* segregation, using a policy of open enrollment without regard to race. There was an immediate move on the part of Negroes to "open enrollment" in Caucasian schools, particularly in the central sections of the city. For the first few years after 1954, there was an increase in the amount of desegregation in these erstwhile Caucasian schools. By the early sixties, however, the same open enrollment prerogative was being used by Caucasians to move from these newly integrated schools into Caucasian schools still farther out near the periphery of the city. This resulted in a trend away from desegregation toward resegregation. Schools that formerly were segregated Caucasian went through a transitional period of being desegregated, then became segregated Negro. This trend was accelerated by the change in housing patterns, with the proportion of Negroes in the inner-city steadily increasing. Here again is an example of open enrollment achieving some initial success in desegregation but failing completely as a long-term solution.

There are three basic reasons why open enrollment must be rejected as the ultimate solution to the segregation problem:

1. The desegregation achieved in the receiving schools is token at best.
2. The sending schools in almost every case are just as segregated as they were before (and sometimes have been stripped of their leading students). Besides this, their morale can be adversely affected by the implied criticism of having students leave to seek a "better" situation elsewhere.
3. A false feeling of accomplishment with having adopted an open enrollment program could get in the way of educators addressing themselves to the task of developing a genuine solution.

Two-way Busing (Reverse Busing)

This type of program keeps the schools essentially as they are except that they would be desegregated by busing some students from segregated Negro schools to segregated Caucasian schools and vice versa. I know of no place in the country where this is being done on any significant scale. To be a genuine desegregating measure this "shuttle service" would have to encompass almost half of the students in each building involved in the trade. This kind of program differs from the Princeton Plan (which will be discussed later) since both schools continue to serve substantially the same grade levels. Theoretically, complete integration could be achieved by this method. It likewise would fulfill the criterion of involving the total community. However, this kind of program is not realistic in terms of community acceptance. Caucasians in cities all over the country have made it abundantly clear that they are not going to sit still for having their children permanently bused to schools in minority ghetto areas. The selection of students to be transported to the opposite school poses nearly insurmountable problems.

In given communities Negroes have consented to permit their children to be transported to predominantly Caucasian schools in a one-way busing arrangement, motivated doubtless by a feeling that they would get a better education in the receiving school and by a commitment to integration that is strong enough to overcome their hesitancy in having their children transported over a long distance. However, I predict that in a short time Negroes will refuse to consent to

this one-way busing arrangement as being too one-sided an attempt to solve what is really a total community problem. Eventually Negroes will refuse to go along with having their children transported to Caucasian areas unless there is a reciprocal arrangement in the opposite direction. Thus, in most communities two-way busing between Caucasian and minority ghettos will not provide the answer to *de facto* segregation. A lone exception to this would be a so-called Princeton Plan which is discussed next.

Princeton Plan

The Princeton Plan calls for abolishing segregation between two schools by having all of the students of the two combined attendance areas attend one of the schools for certain grades and then all of them go to the other school for other grades. Thus, each of the two schools would draw from the entire combined attendance areas for those grade levels which it serves. The desegregation is total for the two attendance areas. There have been many modifications of this plan since Princeton, N.J., first used it to solve its problems in the late forties. This type of plan, where it can be used feasibly, meets all of the criteria for a successful solution of *de facto* segregation discussed above. The desegregation is complete; the number of students on each school site at a given grade level is increased, thereby offering greater flexibility in grouping and scheduling and better chance for teacher specialization and use of specialized equipment. This plan also involves the total community. In a small community like Princeton, with only two schools, such a plan could be effective.

In the large cities, where the problem exists, this plan is difficult to implement. For prime effectiveness the two schools involved must be close to each other. The segregated Caucasian and segregated Negro schools in the average major city are located far apart, frequently separated by a "buffer zone" of relatively integrated schools. Thus, finding the schools to match each other in a Princeton Plan would pose difficulties. To be effective in a large city, the plan must be accompanied by a massive two-way busing program. This is not impossible but does pose great difficulties.

Redistricting

Sometimes it is possible to improve the racial balance between adjacent schools simply by altering the attendance boundary between

them. This is rarely satisfactory. First, it is difficult when redrawing boundaries to avoid overloading one school and leaving another with empty space. Second, communities are changing at such a pace that any gains for integration achieved through redistricting are usually short lived. Third, people affected by the redistricting frequently fight it vehemently. While it is sometimes necessary to move forward with a desirable program in spite of opposition, the relatively minor and temporary gains to be made through redistricting frequently are not worth the antagonism that can be aroused. Redistricting, likewise, suffers from the same handicap as the Princeton Plan as far as the big cities are concerned. Only rarely are a segregated Caucasian school and segregated Negro school side by side. Usually there are intervening schools in various stages of desegregation and transition. Schools deep in the heart of either a Negro or Caucasian ghetto are relatively unreachable by this means. Although individual situations might be alleviated in given smaller communities, redistricting is not a promising approach to the problem in the large metropolitan areas.

Paired Schools

Many schools have adopted programs of pairing schools (one Caucasian, the other predominantly minority) into partnership arrangements. In this type of program students frequently share such activities as playdays, science camping trips, assembly programs, joint PTA and/or faculty meetings, and even open enrollment between the two schools. Except for the latter feature, this program completely begs the question of segregation in enrollment. In effect, it concedes segregation and then attempts to provide some "integrated experiences" while keeping the enrollment separate. As an answer to segregation this program has been totally, and rightly, rejected by Negroes. The only way to make paired schools work for desegregation would be to have the paired schools involved in a two-way busing arrangement or a Princeton Plan between them. The strengths and weaknesses of the two approaches just discussed would then apply to the paired schools. Although better than nothing in terms of giving teacher, students, and parents a chance to have some contact with members of other races, the paired school plan cannot be considered as anything more than an introduction to intergroup contact. If considered as an answer to *de facto* segregation, this approach can be harmful by dissipating energies that would be better spent looking for an actual solution.

One-Grade School

This is a modified "Princeton" approach and has been used in medium-sized cities to overcome *de facto* segregation among three or more schools at a given level (e.g. elementary, junior high). Berkeley, Calif., and the New Jersey cities of Englewood and Teaneck have used the plan to eliminate segregation at a particular level. Berkeley formerly had three junior high schools, each serving grades 7 to 9. This city converted the predominantly Negro junior high school into a school serving all ninth graders in the city. The two remaining junior high schools then divided the city between them for grades 7 and 8. Since there were only two schools for grades 7 and 8, it was possible to divide the Negro and Caucasian areas of the city between them so that each was a desegregated school. Since Berkeley already had only a single senior high school, this enabled us totally to eliminate *de facto* segregation at the secondary level. The ninth grade school has been renamed the "West Campus" of Berkeley High School and organizationally is considered to be part of a 4-year high school program.

In Teaneck, N.J., the concern was at the elementary level. There a predominantly Negro school was converted into a school serving a single grade, the 6th grade. The remaining schools were made kindergarten through five and the students who formerly would have attended the predominantly Negro elementary school were divided among them. Thus, *de facto* segregation was wiped out at the elementary level in Teaneck. Although the programs in Teaneck and Berkeley were developed independently, the sequence of events in the two communities, including the time element, bear amazing similarities. Both communities took these steps voluntarily after thorough study and widespread community discussion of the subject. In each case there was spirited local opposition from those who did not feel it necessary to overcome *de facto* segregation. In Teaneck there were strong threats of physical violence—even to the extent that the police provided protection for the superintendent and were at school when the new program was first implemented. In Berkeley the board members were subjected to a "Recall Election" after adopting the new program. Fortunately, the community sustained the board members by a substantial majority.

Englewood presents a slightly different picture although its "solution" was similar to that of Teaneck. Englewood closed its predominantly Negro school and converted it into an administration building.

Then they made one of the remaining schools a 6th-grade school and divided attendance boundaries among the others in such a way that *de facto* segregation was eliminated. Since that time Englewood has gone further and designated two of its schools to be 2-year 5th- and 6-grade schools, preparatory to moving to a 5 to 8 middle school arrangement in future years. Thus Englewood had a one grade-school arrangement only temporarily. Englewood differed somewhat from Teaneck and Berkeley in that its progress was not entirely voluntary. In fact a community vote defeated a desegregation proposal when first introduced. Although the administration and staff were eager to move ahead, progress came only after the State Commissioner of Education mandated desegregation.

As these examples illustrate the one-grade school can be used in certain situations to achieve integration. The geography of a community and the density of population at each grade level must be considered in this kind of program. These considerations could be limiting factors in very large cities.

Although the approach has produced desegregation in the cities mentioned, educators are divided on the wisdom of creating separate schools that serve only one grade. In my opinion, students need much more than that to become adjusted to a school and to be able to get the maximum benefit from its offerings. I feel that by going to a new organization Berkeley has made a definite advance over the *de facto* segregated 3-year junior high school organization which it had previously. However, I feel the students would be better off, from an educational and psychological standpoint, if the 9th grade were located on the same campus with grades 10 to 12, with one site serving all 4 years of high school. We are currently exploring in Berkeley the possibility of acquiring such a site. In my opinion Englewood is moving in the right direction by going from a single-grade 6th-grade school in the direction of a 4-year middle school serving grades 5 to 8.

Children's Academy

Although it does not provide complete integration, a proposal has been developed in Mount Vernon, N.Y., to provide limited desegregation for each child while retaining use of the neighborhood schools. The Mount Vernon proposal envisions placing a "children's academy" on a large tract of land. All the children in the city would be bused in

staggered shifts to this academy for 2 hours a day. The balance of their program would be spent in their neighborhood schools. The district's various subject area specialists would be assigned to the children's academy. Each youngster would have a special program worked out for him at that site. Once the children were bused to the academy, they would be dispersed and would not remain intact as school groups. Thus, for that portion of the day which was spent on the children's academy the children would be in totally desegregated programs. Since one-third or one-half of the students would be at the children's academy during each period of the day, the neighborhood schools would be accommodating a proportionally smaller group at any given time. This would enable them to make drastic reductions in class size and would provide the opportunity for greater flexibility in grouping and scheduling.

This proposal has the advantage of providing at least some integration for every child in the school system while still making use of the millions of dollars which the district has already invested in its existing school plant. The proposal is being attacked, however, from both directions. Those who oppose any integration attack it as being too great a concession to civil rights groups. The civil rights groups attack it on the ground that it does not provide total integration.

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The above discussion outlines major types of programs that have been developed in an effort to come to grips with the *de facto* segregation problem. There are probably as many variations of these ideas as there are communities that have tried them. In many instances satisfactory local programs have been developed along the lines of one or a combination of some of the plans I have discussed. I feel strongly, however, that the ultimate solution to the problem does not lie along any of these lines, particularly in the large cities where the problem is most acute. In the latter communities these programs are merely patchwork and in many cases do little more than ease the localized pressure without coming to grips with the basic district-wide problem. What is really needed is a massive overhaul of school systems as a whole. In fact, with our inner cities moving in the direction of becoming minority centers surrounded by Caucasian suburbs, ultimate solutions will almost certainly have to be accomplished on a regional basis crossing local school district lines. The only serious proposal to date which

offers promise of effecting a real solution to the *de facto* segregation problem, and meeting the other criteria I have discussed here, is the "educational park" concept.

Educational Parks

There are probably as many definitions for educational parks as there are people defining them. Individual park projects differ in the number of grade levels served, in acreage, in size of attendance area from which students are drawn and in the type of program envisioned. However, all educational parks have certain features in common. They are designed for a relatively large student body and attendance area compared to the traditional neighborhood school.

By drawing students from many neighborhoods over a large area of the city (or across city lines) educational parks afford greatly improved opportunities for bringing together students of different races, ethnic groups, social, economic, and cultural strata. In small or medium-sized multiracial cities such parks can be located to serve all of the children in the community at given grade levels. In larger cities, or communities that are already segregated, these parks can be located near the periphery of the inner-city to serve both the minorities of the inner-city and the Caucasian students living nearer the city limits and in suburban areas. It is important in locating an educational park that it be readily accessible to all racial groups. Although the local topography will affect decisions about where parks are located they should be placed so that no single racial group feels that it must bear an unfair share of transportation problems.

Examples of how local conditions affect differences in placement of educational parks are furnished by such communities as East Orange, N.J., and Baltimore, Md., or Washington, D.C. East Orange has an interracial population of approximately 80,000 living in about 4 square miles. They are contemplating what they call an "educational plaza" to serve all of the schoolchildren in that city on one site. Since the community is interracial, the location of the park within the city could solve its *de facto* segregation problems. On the other hand, in cities like Baltimore and Washington, where the inner-cities are becoming increasingly populated with minority races (as white citizens move to the suburbs), solutions to the *de facto* segregation problem cannot be made on the basis of the inner-cities alone. The solution will have

to involve the inner-cities together with the surrounding Caucasian suburbs. In such cases the parks should be located farther out from the center of the inner-cities and so placed that they are readily accessible to minority residents of the inner-cities and the Caucasian residents of the outlying areas. In both types of community, however, it should be obvious that desegregation cannot take place in small neighborhood schools serving small areas that are, in most cases, segregated to a single race. Any proposed solutions based upon retention of the neighborhood school principle are doomed to failure.

Educational parks are justifiable also from the standpoint of other important educational considerations. The large number of students at each grade level greatly enhances the possibilities for flexible scheduling, large and small group instruction, and increases the number of electives that can be offered feasibly. This concentration of students also permits more economical use of highly specialized, expensive equipment. Staff specialists can be more effectively utilized since they need not spend time traveling from school to school. More effective and economical use can be made of such expensive facilities as gymnasiums, libraries, cafeterias, auditoriums, by eliminating the need for duplication in small neighborhood schools all over the district. Deployment of staff will also effect economics and make specialists more readily available to students.

The educational park concept is a promising avenue of attack on *de facto* segregation. It is a means of making significant improvements in our educational programs and is an avenue for effecting substantial economies. Thus, while my interest in educational parks for the purposes of this paper is primarily as an integration measure, I strongly endorse the concept of educational parks even in districts that are racially homogeneous.

In Berkeley, we already have the equivalent of an educational park at the high school level. We are now addressing ourselves (the staff and a joint staff—lay citizen school master plan committee) to a study of utilizing the concept for grades kindergarten through 8. We feel that educational parks, accessible to all racial groups, represent the one solution that holds the promise of complete desegregation while providing opportunity for significant improvements in the educational program offered our young people.

Common Fears Related to Integration

Any proposal designed to achieve desegregation will run into opposition. Opponents will attempt to find flaws in any program. Arguments pro and con can be expected to vary; many will be relevant only to the specific proposal under attack.

However, the underlying fears which motivate opponents of desegregation are similar in all cities. Among the more common are the following:

1. Fear of loss of neighborhood school: this fear serves as the rallying cry for opponents of integration in most communities. Efforts are made to place the neighborhood school as a concept along with the Declaration of Independence and the flag as great American traditions. Efforts to tamper with it are made to appear somehow not quite patriotic. The fear itself is well founded—it is virtually impossible to develop an effective desegregation program in larger communities based upon the neighborhood school. However, the neighborhood school is not the sacrosanct institution which many of its proponents try to make it appear. Many communities have never organized their school system along neighborhood lines. Examples are those Southern communities which have students going past one school to get to another simply because enrollment at the first school is restricted to another race. Although, in prior generations, neighborhood schools have served many communities well it does not follow that the pattern cannot be changed to meet newly recognized needs and a new set of circumstances. The corner grocery is giving way to the supermarket. The small family farm, on which most of the labor was done by hand or by animal, has given way to a larger agricultural unit utilizing laborsaving equipment. The same trend is proceeding in medicine, libraries, and industry. In an era of greatly improved transportation, why should not our schools keep pace in altering their organizational patterns to meet new educational needs?
2. Fear of lowering of standards in erstwhile Caucasian schools: opponents of integration are fond of quoting standardized test scores in an effort to show that standards will be lowered in Caucasian schools if they are desegregated. Actually, these

scores, in spite of their limitations, bear eloquent testimony to the failure of the "separate but equal" argument. However, such evidence as is available does not support the argument that the performance of Caucasian students is harmed by desegregation. Conversely, there is considerable evidence that the performance of Negroes is dramatically improved when exposed to the increased challenges and improved programs associated with school desegregation. Although problems can result if teachers and students are not prepared for participation in a multiracial school, these problems need not arise if there has been proper planning and preparation.

3. Fear that contact with Negro children will be harmful to Caucasian children: since this is the most bigoted of the three fears listed here, it usually is the least expressed. However, it provides the latent motivation for many people who express their opposition to desegregation in more "acceptable" terms. Actually this "fear" is aimed in the wrong direction. It has been the Negro rather than the Caucasian who has generally felt harmful results from interracial contacts over the hundreds of years in our country's history. However, the whole argument is irrelevant. Our children, both Caucasian and Negro, are going to have increasing contact with each other whether the adults like it or not. With transportation and communication barriers down, our world is now interracial. Children of all races are going to be living in increasingly close contact with each other. The time for them to start is while they are still in school and before the prejudices of the older generations have become firmly implanted.

CONCLUSION

Now, 12 years after the historic Supreme Court decision on school segregation, we find that the problem is more acute than ever. In spite of a growing awareness of the schools' responsibilities, we find that the problem is growing faster than our efforts to come to grips with it. The changes occurring in our urban centers today make it necessary for us to "run to just stand still." In Detroit this summer a month-long conference on school desegregation, including both parents and educators, delivered an ultimatium to the Board of Education of that city to address itself to the task of complete school desegregation with a

timetable attached. All of our major urban areas are facing similar situations. As educators, we *have* to move on this subject.

Just as the schools are an integral part of society at large, so must school integration be part of a massive assault on community cancers—housing, unemployment, poverty—which blight the lives of children in Negro ghettos. Our goal can be nothing short of making the American dream a reality to all citizens.

Analysis of the Feasibility of Establishing a System of Education Parks in a Metropolitan Region

(This paper was prepared for the Commission by Dr. Paul Davidoff, Chairman, Department of Urban Planning, Hunter College, New York, N.Y.)

The education park concept represents a response both to technological change and to social injustice. The park concept was first developed as a means for providing racial desegregation of public schools, and more recently the concept has won support from educators who believe that parks can provide a physical setting for superior education. This conclusion is based on the many efficiencies in the use of teachers and other school resources which would result from linking a number of schools on a single campus.

While the education park concept seems to hold much promise for American public education, it has not yet been tested in a large city. Because constructing a system of parks would be extremely costly, thorough investigation and analysis of the various ways of implementing the concept must precede the construction.

The purpose of this study is to examine in a preliminary way one set of issues related to the development of education parks. The issues to be analyzed here are those which arise in considering both the physical attributes of a system of parks constructed within a metropolitan region, and the physical consequences to the affected population flowing from the operation of such a system.

The metropolitan orientation of this study arises from a concern, shared by many of those who look to the education park as a means of eliminating *de facto* school segregation, that any system of school attendance requiring neighborhood schools or education parks within a single governmental unit to be integrated will prove unfeasible. In many cities, the size of the Negro population attending the public schools exceeds that of the white population, and requiring desegregation would mean that many schools would be majority Negro. The

number of cities in which the Negro public school population is at least equal to the white is increasing. One means for maintaining a large white population in a school system is to redefine the boundaries of the system. Such a system might be established by creating a single school district out of all or a major part of a metropolitan region. It would require that the school population in a central city be joined with the population attending schools in the surrounding suburban communities.

Basic Assumptions

A number of assumptions underline this study. The first is that the resources allocated to get the education park system adopted and constructed are better spent for this purpose than for other purposes. One alternative allocation thus deemed inferior would be that made for the qualitative improvement of the present school system. Another alternative would be to promote desegregation in the present school system by sponsoring the development of low income housing in the suburbs.

A second basic assumption is that there is a limit within a metropolitan region beyond which the white population will not pass in order to avoid school desegregation.

A third important assumption is that the Federal Government would supply the financial and technical support to communities agreeing to participate in developing an education park system. Without such support there is little reason to believe that local government units would or could find it feasible to participate.

Related Strategies to End Discrimination and Segregation

One of the discouraging findings of this study is the fact that Negro students attending education parks probably would have to spend a greater time in travel to and from school than whites. While the required excess distance and time may not be so great as to make the system unworkable, it does impose still another hardship on Negroes.

While an education park system may work effectively to reduce feelings of racial inferiority and superiority, by itself it would be inadequate to completely eliminate racial inequalities in the cities. If no other basic changes were made in the racial structure of metropolitan communities—such as changes in residential patterns—students attending desegregated schools would come from and return to

segregated communities. An effective fight against segregation calls for attack on discrimination in jobs, income, and housing, as well as in education.

Therefore, although this study is concerned with only education, it should be recognized that education is closely linked with other public functions and that changes in one functional area may affect other areas. If for the purposes of this study the objective sought is desegregated schools, such an objective would be fostered by also providing low income housing opportunities in suburban communities and by creating employment opportunities or other income supports to enable Negroes to buy suburban housing. In concert with an education park system these programs would help foster an environment in which desegregation was a continuing part of community life, rather than an event occurring only during school hours. It would be shortsighted to promote school desegregation apart from action in these other areas. In the Demonstration Cities program, as well as in other programs, considerable emphasis is now being placed on making the ghetto better and more permanent. Efforts to obtain desegregation through the education park may be seriously undermined by local and federally supported programs which will compound segregation of neighborhoods and schools.

Nature of the Study

As originally conceived this was to have been a study of a number of metropolitan regions. Time factors limited the undertaking to a brief examination of the implications of establishing an education park system in a single metropolitan region. The region studied was the Philadelphia Metropolitan Area.

This is a feasibility study. While there may be doubt regarding the political acceptance of a metropolitan school system by affected citizens, there are no technical reasons why a system of parks could not be constructed. This study does not attempt to answer the question of how to make an education park system politically acceptable, but, in examining the physical and spatial characteristics of such a system, an effort has been made to indicate ways in which some of the potential antagonism to the concept might be reduced.

This study is not a full-dress report on an education park system for the Philadelphia region, but a study of a limited aspect of the feasibility of such a system: the possibility of allocating and physically

transporting the student population of the region to a system of education parks. The problems and opportunities found in the Philadelphia region were considered characteristic of those to be found in many large metropolitian areas. This does not mean that the characteristics of other regions would be identical. But the general location of the white and Negro populations in the Philadelphia region, and the implications of such locations for a system of desegregated education parks is believed to be fairly typical. Nevertheless, similar or more detailed studies of other regions is required for a fuller understanding of the implications of education parks.

The Extent and Character of the Region

Philadelphia is a city with a Negro population representing almost a third of the total of about 2 million. At the time of the 1960 Census, Negroes represented about 26 percent of the city's population. The 1965 Negro population was estimated to be about 31 percent of the total (Delaware Valley Regional Planning Commission, *Population Projections*).

Philadelphia is a part of the Philadelphia Standard Metropolitan Statistical Area (SMSA). Its 1960 population was 46 percent of SMSA's; the city's share of the region's population has been decreasing rapidly, as its population remains constant and the population of the surrounding region increases. The Negro population in the region comprised nearly 15 percent of the SMSA's 1960 population. Approximately 80 percent of the Negro population resided in Philadelphia at that time.

The Philadelphia SMSA is comprised of Philadelphia and four counties in Pennsylvania—Bucks, Chester, Delaware, and Montgomery, and three counties in New Jersey: Camden, Burlington, and Gloucester. The New Jersey counties contained 17 percent of the region's 1960 population.

In determining the appropriate region for this study, parts of the Philadelphia SMSA were excluded from the region in which the education park system would operate. Chester County in Pennsylvania was not included. Most of that county is so far from Philadelphia and from any substantial concentration of Negro population that to integrate white pupils from Chester County with Negroes would incur excessive transportation costs. Two towns in Chester County—Easttown and Tredffrin—are reasonably close to Philadelphia—between

35 to 45 minutes from the center of Philadelphia. But because of a desire to limit the size the area covered—in order to limit transportation costs and time—and in order to maintain a racial balance within education parks in which, in general, a minority group never should be less than about 25 to 30 percent of the school population, it was decided to exclude these towns.

The major areas excluded from the study, however, were the New Jersey portions of the SMSA. This exclusion was based on two factors. First, the City of Camden and its Negro population have approximately the same relative characteristics in relation to the portions of New Jersey in the SMSA as does Philadelphia, and its Negro population, to the Pennsylvania portion of the region. The integration of the New Jersey communities surrounding the City of Camden can be treated as a separate problem. But even if there were some reason for making the New Jersey and Pennsylvania populations integrate in one or more park systems, the political and administrative problems of establishing an interstate school system seem to preclude its consideration.

Thus the study examined Philadelphia and the three Pennsylvania counties surrounding it. Those counties are: Delaware, Bucks and Montgomery. Table No. 1 describes the 1960 and estimated 1965 populations of the region covered.

In 1965 there were approximately 540,000 public school students in these four counties. Of that number 151,121 were Negroes in the

TABLE 1.—*Population of Counties in the Philadelphia SMSA, 1960, By Race*

County	1960 population [1]		Estimated 1965 population [2]	
	White	Negro	White	Negro
Philadelphia	1, 467, 479	529, 240	1, 421, 600	621, 400
Bucks	302, 627	5, 793	340, 900	6, 450
Delaware	513, 991	38, 529	566, 850	42, 650
Montgomery	497, 269	18, 834	618, 650	22, 950
Total	2, 761, 376	592, 396	2, 948, 000	693, 450
Total population	3, 353, 772		3, 641, 450	

[1] Source: 1960 U.S. Census.

[2] Source: Delaware Valley Regional Planning Commission.

Negro as percent of total population, 18 percent.

Philadelphia school system. There are approximately another 15,000 Negro students in the three other counties. For the purposes of this study, it was estimated that there were about 165,000 Negro students in the four counties, or about 31 percent of the total school population.

Distribution of Students: The Racial Ratio

A Negro student population of nearly a third of the total school enrollment, heavily concentrated in the core city, is the basic datum of the study. It has relevance to both the size of the region in which a system of education parks would be established, and to any transportation system required to establish desegregated parks.

In coming to grips with the issue of the students throughout the region affected, the following considerations were paramount:

1. A major objective of the system is to bring the maximum number of students into a fully desegregated school.
2. "Full desegregation" requires avoidance of so few Negroes in a school as to make them relatively insignificant in the school's social system, and the creation of predominantly Negro schools.
3. Travel time should not be excessive for any student. This requirement is especially important for the younger students.

With these objectives in mind, and with the knowledge that the region as a whole contains about seven white students for every three Negroes, it is possible to set up alternative systems for student distribution. Any distribution system, of course, is complicated by the constantly changing ratio of whites to Negroes in the region. In the four county area studied, the Negro student population is increasing by about 3 percent per year.

Philadelphia Negroes live in the geographic center of the region. Most are located within 3 miles of the center. The boundaries of the region are at least 14 miles from the center. The implications of this are clear. If schools are to be desegregated, it will be necessary for members of one or both of the races to travel some distance to an education park.

In thinking about the location of education parks in the region, an important assumption was made; if suburban jurisdictions were to participate with Philadelphia in establishing education parks, such parks—for political reasons—would have to be located much closer to whites than to Negroes. A more equitable criterion would establish

the same transportation times for Negroes as for whites. Nevertheless, to gain political acceptance it is likely that Negroes will be required to spend more time in travel than will whites.

If this is true, and given an increasing Negro population, there is a further question: should the region be expanded over time in order to permit a larger white population to reap the benefits of the education parks? Or, should the construction of the park system be phased so as to progressively reduce the excess travel time required for Negro students?

With a specified Negro population at one point in time, one way to increase the number of whites in the system is to reduce the proportion of Negroes in each school. Given 165,000 Negro students and a desire to integrate a large number of whites, then with a ratio of one Negro for every nine whites, 1,485,000 whites could be served by such a system. But such a solution would require a region from Philadelphia to beyond Trenton, N.J., and Wilmington, Del.

Alternatively, if the desired ratio were to be set at 70 : 30 with the 70 percent to be comprised of the majority race in any given residential area, a quite different result would follow. Such a basis for establishing the schools' attendance would justify education parks close to areas of heavy Negro concentration, and would place a high number of Negroes in such schools. This would be more equitable for the Negro population, since under this solution the average travel time for Negro students would be reduced to approximate the average time for white students. But this alternative would also seriously reduce the number of white students attending education parks in the region.

The solutions offered in this study are mixed. Some predominantly Negro parks are proposed, as are some parks with an even amount of Negroes and whites, but most are predominantly white.

In general an attempt was made to achieve a 7 : 3 ratio, with the whites in the majority. Deviations from this ratio were made to avoid excessive travel time. The general criterion employed was that of creating the largest possible region with the lowest average travel time for students. Because that rule contains conflicting objectives it is not one which can be used as an objective measure, but requires judgment.

The application of this rule excluded outlying portions of the three suburban counties surrounding Philadelphia. All of the excluded areas were so far removed from the Negro population as to make their inclusion within the system very costly in terms of travel time.

Student Population in Each Park

In this study it was assumed that education parks would serve between 15,000 and 20,000 pupils. Such size estimates were based on the limited literature dealing with the issue. In the development of this study it was assumed that the parks should include all age groups. The efficiencies in education promised by the park system probably do not require that a park serve children from kindergarten through high school. But many advantages and administrative efficiencies may result from the inclusion of all age groups in the school system.

In order to simplify this first effort at distribution of the region's population into a system of education parks, 1965 enrollment figures were employed. Even these figures were not entirely satisfactory, for it was impossible to obtain recent data on the Negro enrollment in two of the outlying districts. The fact that population shifts will take place over time, both in terms of absolute number of students in the region and in the proportion and distribution of Negro students would be important in a final proposal for park location.

The Alternative Solutions

In setting forth alternative allocations of Negro and white school populations in a regional problem of this kind, a mathematical model may be employed which deals with the concentration of population by race and district in a highly schematized way, suitable for use in many metropolitan areas. An approach to such a model is discussed in a paper written by Professor C. Peter Rydell of the Hunter College Urban Planning Program.[1]

The actual techniques used in arriving at a proposed solution for the Philadelphia region, however, relied on handicraft methods. Given the student population data and the information about the time-distance between different places in the region, solutions to distributing the population to education parks were designed so as to minimize travel time and maximize the number of students attending education parks.

Location and Site Factors

The location of education parks would be determined by a number of factors. The criteria presently applied to the quality of the environ-

[1] A copy of his paper may be obtained by writing the Commission.

ment surrounding a large complex of schools would still apply and additional factors would have to be considered. First, a regional system of parks could define a regional park and cultural facilities belt around the middle of a metropolitan region. Being far more dynamic in function than the "green belts" so frequently proposed as means for giving form to such regions, cultural belts could provide for more civic activities than precollege education. A full complement of cultural, political, social, educational, recreational, and possibly, commercial activities could make the education park area the major focal point of the region. Housing for the educational and service staff as well might also be made a part of such a complex.

The education park also could be seen as a major reuse of land in renewal areas. Under circumstances of major Federal support for low cost housing throughout metropolitan areas, education parks might well replace outworn housing and thus significantly reduce densities in the core of central cities.

In order to facilitate transportation of students to and from education parks, they should be located near major transportation routes. One facility which might well serve the transportation needs of students would be the commuter railroads. Assuming a migration of students from the center of the region in the morning and back in the afternoon, it might be possible to make efficient use of commuter trains which otherwise would be idle or empty. This solution would be particularly attractive if an education park could be built near a rail station, for that would obviate the need for busing to and from the station—at least at one end of the trip.

In the Philadelphia region both the Reading and the Pennsylvania railroads pass through the middle of the area in which probably the greatest number of Negroes would be transported to the suburbs, and stations in both North and West Philadelphia could be employed. The use of the mass transportation system (because of its promise of great cost efficiency) is worth investigation. Adequate supervision and staggering of travel times might permit the possible disadvantages of the system to be overcome.

Another major factor in determining location of education parks will be that of the resources available for land purchase. Relatively attractive and unattractive sites are available in the region. And, as indicated earlier, education park sites could serve as major reuses of land in renewal programs.

In general it has been assumed that parks containing 15,000 to 20,000 students would require sites of between 100 and 140 acres, and sites of this size may be extremely difficult to establish in many of the older sections of Philadelphia. Using cleared slum land for sites would only be practical at a time when an adequate supply of decent housing at low cost in suitable environments became available to the former slum residents. Should increased Federal housing subsidies make this possible, the site selection problem would be greatly eased.

Assembling sufficient land for education parks will prove difficult and costly in some cases. In a study prepared by an ad hoc committee of the Philadelphia Urban League, it was found that large tracts of land were available in Philadelphia for about two-thirds of the parks that would be required were an education park system to be established throughout the city. Large sites were particularly difficult to find in the older sections. One solution to this problem, an old and not very good solution, would be to provide only a small amount of open space in the parks located in the heavily developed areas of the city. This solution probably would be required if education parks were to be developed in other old and large cities.

Maps 1 and 2 shows two sets of solutions. Each designated Learning Center (LC) represents a region in which a school complex would be constructed. Not all of the pupils attending a Learning Center would reside within the region in which one is shown on the maps. In a number of situations it would be necessary to draw students from a far larger region in order to achieve the desired racial balance. Because a number of Learning Centers draw students from the same area, it is difficult to portray the attendance boundaries of each center. Maps 1A and 2A indicate the areas affected by each Learning Center.

Negroes do not have access to housing throughout the region and are limited in their residential location to a few neighborhoods. Thus it is necessary for purposes of achieving desegregated school populations that each Learning Center draw its Negro students from one or more of the Negro communities in the region. A consequence of this is that a number of Learning Centers must draw upon the same neighborhood for their Negro population. Maps 1A and 2A show that the Negro communities within Philadelphia will serve a number of Learning Centers, and that each major concentration of Negroes will serve a number of Learning Centers.

Charts 1, 2, 3, and 4 reveal the number of students attending each Learning Center and the residence districts in the region from which students must travel to attend a particular Center. The districts identified in the charts are the eight school districts within Philadelphia. Those students from areas outside Philadelphia are identified in the final column of the charts under the heading Outside Philadelphia.

On each map there are a number of circumferential time lines. These lines indicate the travel time from the center of the region, the intersection of Broad and Market Streets in Philadelphia, to any point within the region. The time lines do not reveal all the information needed to be known in order to estimate the travel time from one part of the region to a particular Learning Center. They only reveal the elapsed time of a direct trip. For that part of the student population residing beyond walking distance to a Learning Center, to determine how long it would take from home to school, it is necessary to take account of more than a direct trip from point to point. It is necessary to account for the time required to walk from home to transportation to pick up point and the amount of bus time devoted to picking up students prior to making a direct nonstop journey to a Learning Center.

An examination of the maps and charts show that few students would be required to travel more than 20 to 25 minutes in a direct drive from home to a Learning Center. But if the time required to walk to a collection point and the time required for a bus to make collections were added to the direct nonstop driving time, then it may be estimated that a travel time in excess of 30 minutes would be required for many students. It should be pointed out that the integration of students from the exclusively white Northeast Philadelphia with the Negroes of the North Philadelphia ghetto would entail the longest and greatest number of trips. If a Learning Center were to be placed between these two populations, then the average travel time might be reduced, but the number of students required to be transported would be significantly greater than would be the case if a Center serving these groups were to be placed close to one or the other of the two groups attending such a Center.

Map 1 and Chart 1 show a solution which serves a greater number of students (in about 40 municipalities) than are served by the second solution. But the second solution involves a smaller effective region

and a smaller transportation distance for most of the students. (Both solutions show a park built near the city of Chester. Chester has at present about 6,000 Negro students in its schools. That Negro population would be sufficient to create an education park of 20,000 students based on a ratio of 70 to 30 between whites and Negroes. That park appears as Learning Center 17 in Solution I and Learning Center 15 in Solution II.) Solution I contains 19 Centers serving a total population of 386,000 students. Solution I involves all of the students in Philadelphia, whereas Solution II, in an attempt to create smaller districts, excludes 77,000 Philadelphia students. Solution I includes 123,000 students from outside Philadelphia; Solution II, again, in order to create smaller districts, includes only 86,000 students from outside the city. The region encompassed by Solution II consists largely of the area lying within 30 minutes travel time from the center of Philadelphia. A number of the districts in Solution II have school populations under the 20,000 figure which is the norm for Solution I's districts. Thus Solution II could be seen as a preliminary stage of Solution I.

By reducing travel time from home in most situations to about 20 to 30 minutes, Solution II may be far more acceptable to parents than Solution I, which, in many cases, would add another 10 minutes to travel time.

Solutions I and II both contain a number of Learning Centers in which the Negro students outnumber the white students by a fairly substantial margin. In order to compare a system of education parks containing a Negro enrollment never in excess of 50 percent of the total with the system developed in Solutions I and II, a new distribution of the student population in the region was developed. Working within the requirement of a 50-percent Negro limit, solutions were developed which did not alter the number of Learning Centers proposed in Solutions I and II. Solution III represents a system containing the same number and distribution of Learning Centers as Solution I. In the same manner, Solution IV is similar to Solution II. Solutions III and IV, shown on Charts 3 and 4, differ from the previous solutions only to the extent that in no Learning Center in Solutions III and IV do the Negro students predominate.

The consequence of the reallocation of students is to enlarge the number of students required to be transported to school, and to increase the average time spent in traveling to school.

Examples of the effects of limiting the percentage of Negroes in a school to not more than 50 percent are seen in both the North Philadelphia and South Philadelphia areas. In both cases it becomes necessary for larger numbers of Negroes to be transported out of their home districts, and for larger numbers of white students to be transported to Learning Centers within the Negro communities. These differences may be seen in a comparison of the Learning Centers in Charts 1 and 2, which have a predominant number of Negroes, with the same Learning Centers in Charts 3 and 4.

The requirement of not more than 50 percent enrollment by Negroes tends to increase transportation costs, and this must be assessed against the educational advantages accruing from a system in which the number of Negro students in a school system never exceeds the number of whites. Of course, a similar appraisal must be made when it is determined that no school can be all-Negro, but must have at least 10, 20, 30 or 40 percent of its enrollment comprised of whites. In all of these cases the benefits to be derived from the degree of desegregation must be evaluated against the costs of requiring students to travel a greater distance than they would in a segregated system.

In examining the feasibility of establishing a system of education parks in a metropolitan area, attention has been given to the effects of such a system on the time and mode of travel required for students. The fact that transportation costs do rise with the degree of desegregation does not suggest that desegregation should be avoided. Rather, the knowledge of transportation costs should direct increased attention to the location of education parks. Additionally, future study must focus on the relative values to be assigned to the percentage of students required to be transported to school and to the lengths of trips required, as opposed to the racial balance achieved in the different education parks comprising the system of parks in the region.

Additional techniques for acquiring large tracts of land in heavily populated sections of Philadelphia might call for design forms for the park other than the standard rectangle that are first thought of as appropriate. For example, a long narrow strip of land might serve as an in-city open belt and might extend for a great distance between South Philadelphia and North Philadelphia. Such a strip might be only a block or two wide. It could be located adjacent to subway, streetcar, or bus routes. The two or three parks designated as Learning Center 1, 2, and 3 on the maps showing examples of solutions for Philadelphia might well be designed as education park strips.

Conclusion

This study of the application of the education park system to a large metropolitan region has demonstrated the likelihood that such a system can be feasibly established, under the limited definition of feasibility discussed at the beginning of this report. Other studies of the costs, staging, location, size requirements, and other planning aspects of an education park system are called for. Such detailed studies may modify or strengthen the view that an education park system may be a useful method for providing desegregated and higher quality education.

There is a major problem in the establishment of a system of education parks which would equalize the transportation costs which will have to be borne by white and Negro students. This study, and the Rydell study, suggest that Negro students will have to travel farther than whites in order to attend desegregated education parks.

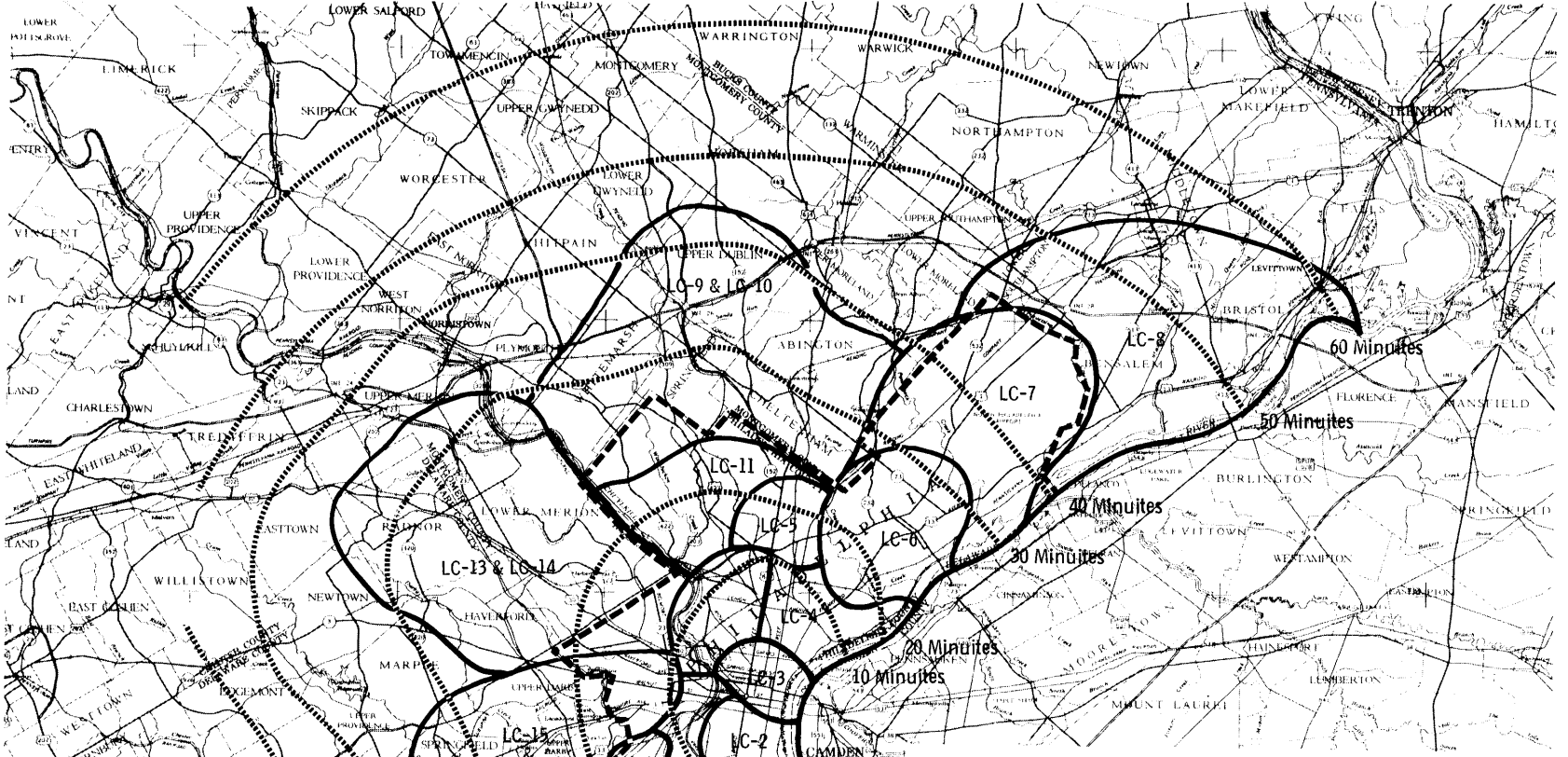
In selecting the first education parks to be constructed it will be useful to find locations for the parks which will tend to equalize the travel distance for whites and Negroes. Within the Philadelphia region there are a number of sites for education parks which would permit city children to attend school with suburban children and for the travel time for both sets of students to be relatively low. The problem of disproportionate travel time for Negroes will not become significant until a large number of the region's parks are constructed.

This report has laid great stress on the difficulties associated with transporting students to education parks. These difficulties do not detract from the essential soundness of the concept, but they do raise difficulties in making the concept operational. The fact of segregation within our society is, of course, a major reason for the development of an educational structure which can work toward eliminating the causes of segregation. However, it is the fact of segregation in housing which creates the transportation problems discussed here.

Although it is true that the first education parks to be constructed can be located fairly proximate to both Negroes and whites, if the education park is not to be just another demonstration project, but is to serve all students, then it is essential that the elimination of housing segregation be associated with the solution to *de facto* segregation in the schools. What is called for, then, is the development of solutions to problems of segregation which attack simultaneously all aspects of the

problem. So long as the Negro is ghettoized and denied access to decent income and jobs, the pattern of Negro settlement in the metropolitan region will remain in general as it is today.

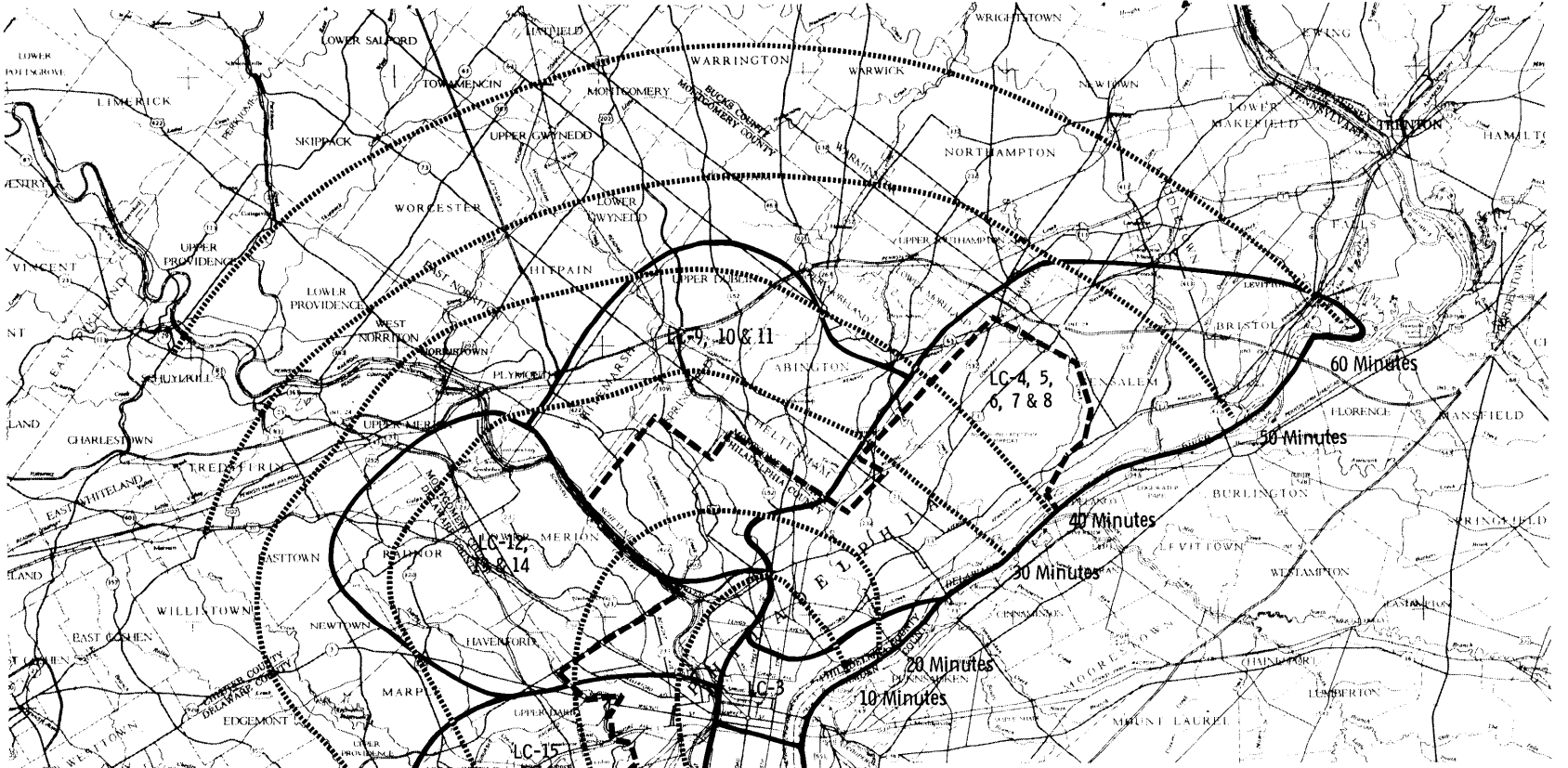
National housing and renewal policy presently is supportive of ghettos. The new Demonstration Cities program will, if anything, make the ghetto more permanent. Housing opportunity for Negroes and for low income groups should not as a matter of public policy be limited to existing low income areas. It may be appropriate for the private market to provide residential location according to ability to pay. But Federal or other public funds do not have to accept the thesis that residential location is a function of a man's wealth. There should be other considerations, among them, destroying segregation. The attack on *de facto* segregation in different functional areas must be integrated.



MAP 1

SOLUTION 1: DISTRIBUTION OF 386,000 STUDENTS IN REGION TO 19 LEARNING CENTERS (LC)

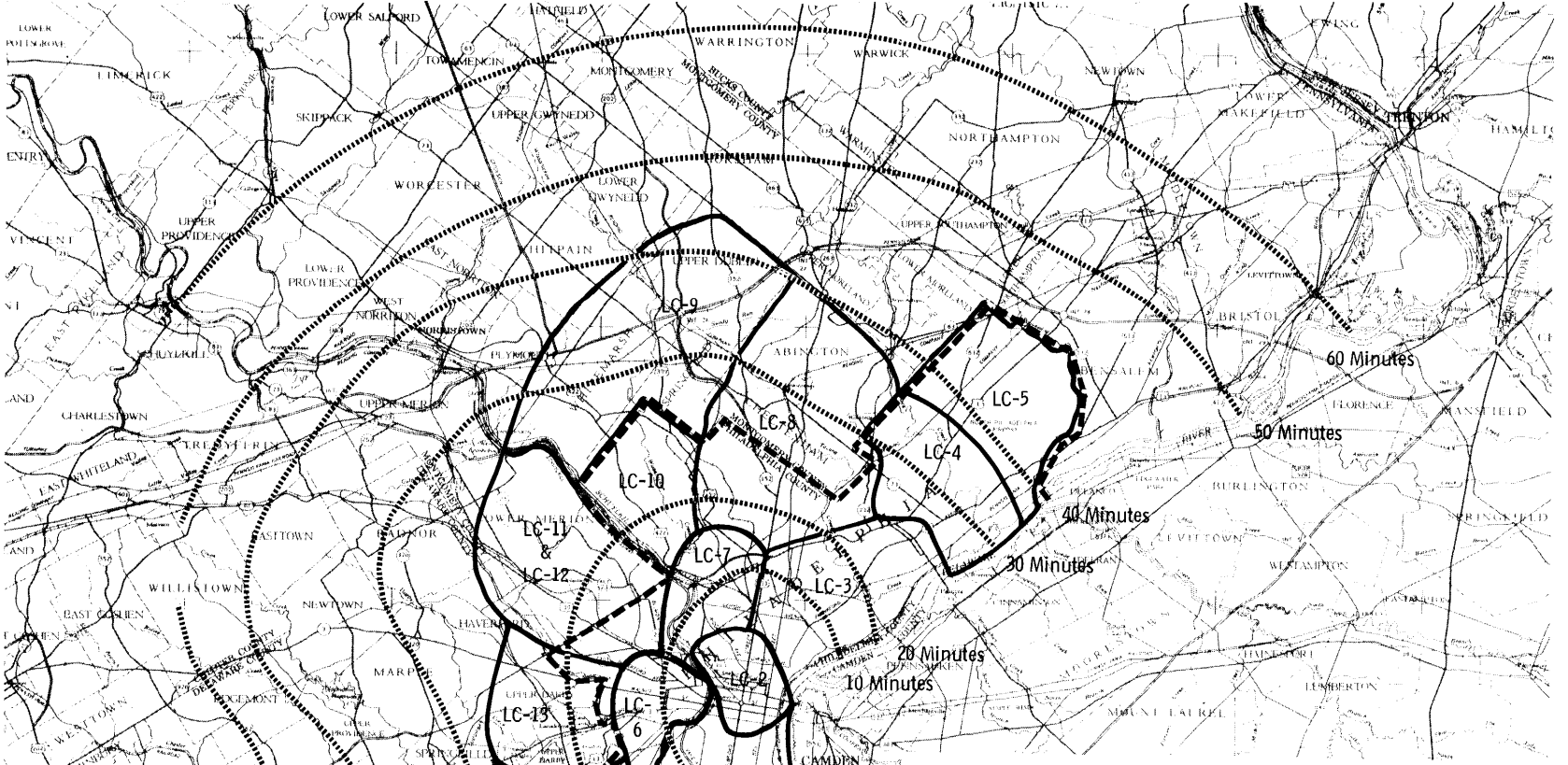
NOTE: Time Lines approximated from report by Penn-Jersey Transportation Study 1975 Transportation Plans, "Appendix V: Time and Cost From Philadelphia Center City to All Internal Districts."



MAP 1A

LEARNING CENTERS DRAW SCHOOL POPULATION FROM WITHIN BOUNDED AREAS DESIGNATED

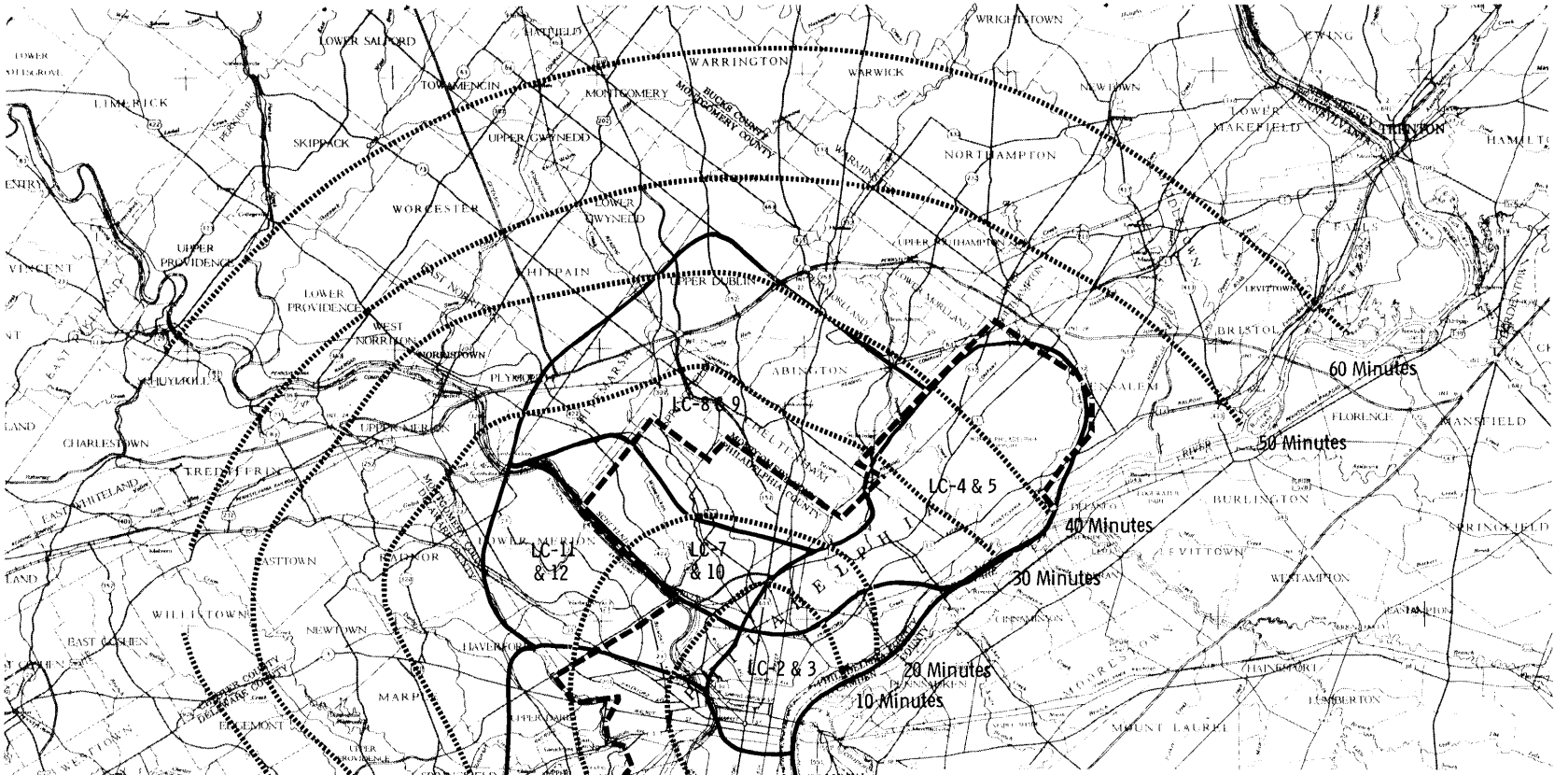
* Learning Centers 1 and 2 must each draw about 2,000 white pupils from area outside bounded area shown on map. White pupils might be sent from area in existing School District #6.



MAP 2

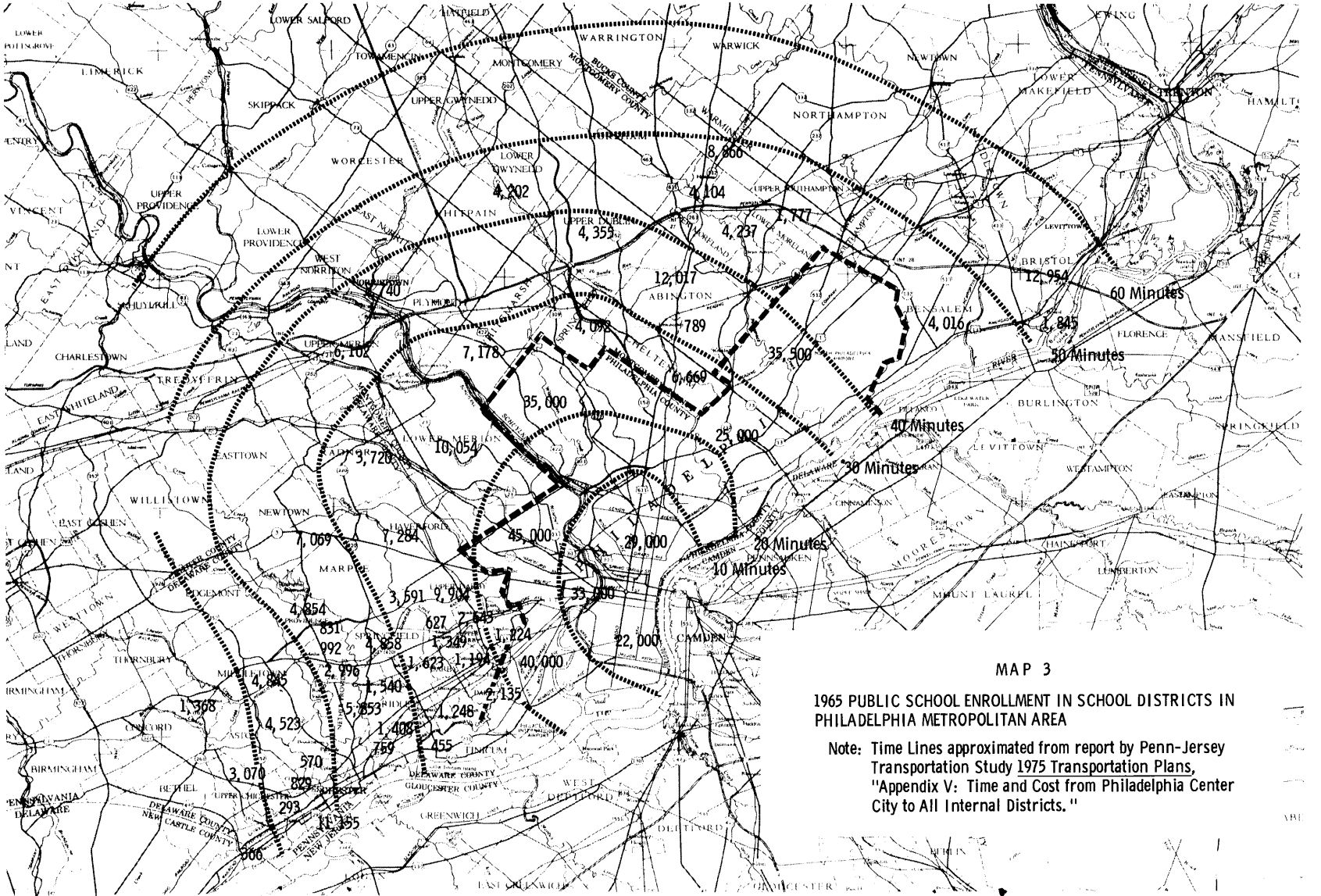
SOLUTION 2: DISTRIBUTION OF 275,000 STUDENTS IN REGION TO 15 LEARNING CENTERS (LC)

NOTE: Time Lines approximated from report by Penn-Jersey Transportation Study 1975 Transportation Plans, "Appendix V: Time and Cost from Philadelphia Center City to All Internal Districts."



MAP 2A

LEARNING CENTERS DRAW SCHOOL POPULATION FROM WITHIN BOUNDED AREAS DESIGNATED



MAP 3

1965 PUBLIC SCHOOL ENROLLMENT IN SCHOOL DISTRICTS IN PHILADELPHIA METROPOLITAN AREA

Note: Time Lines approximated from report by Penn-Jersey Transportation Study 1975 Transportation Plans, "Appendix V: Time and Cost from Philadelphia Center City to All Internal Districts."

CHART 1.—*Solution I: Home districts of students attending Learning Centers*

Learning Center	Total number of students (thousands)																		
	Negro	White	District 1		District 2		District 3		District 4		District 5		District 6		District 7		District 8		Outside Philadelphia, Negro and white
			Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	
Total.....	386,000		34.4	5.7	28.1	4.8	13.4	8.7	38.7	5.8	14.1	15.1	17.0	18.7	4.3	22.1	0.5	34.7	.....
No. 1.....	12	8	.....	.....	12.0	4.8	0	3.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
No. 2.....	12	8	.....	.....	12.0	0	0	5.5	.....	.....	0	2.3	.....	.....	.....	.....	.....	.....	.....
No. 3.....	10	10	.....	.....	4.0	0	3.0	0	3.0	0	0	10.0	.....	.....	.....	.....	.....	.....	.....
No. 4.....	10	10	.....	.....	.....	.....	7.0	0	.....	.....	3.0	3.0	.....	.....	0	7.0	.....	.....	.....
No. 5.....	8	12	.....	.....	.....	.....	.....	.....	8.0	0	.....	.....	.....	.....	0	12.0	.....	.....	.....
No. 6.....	6	14	.....	.....	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	0	3.0	0	11.0	.....
No. 7.....	5	15	.....	.....	.....	.....	.....	.....	.....	.....	4.0	0	.....	.....	1.0	0	0	14.0	.....
No. 8.....	5	15	.....	.....	.....	.....	.....	.....	.....	.....	1.0	0	.....	.....	3.3	.....	.5	9.0	[1] 5
No. 9.....	6	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	[2] 14
No. 10.....	6	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	[2] 14
No. 11.....	6	14	.....	.....	.....	.....	.....	.....	1.0	0	.....	.....	5.0	14.0	.....	.....	.....	.....	.....
No. 12.....	10	10	.....	.....	.....	.....	.....	.....	10.0	6.0	.....	.....	0	4.0	.....	.....	.....	.....	.....
No. 13.....	6	14	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	.....	.....	.....	.....	[3] 14
No. 14.....	6	14	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	.....	.....	.....	.....	[3] 14
No. 15.....	6	14	1.0	0	.....	.....	.....	.....	5.0	0	.....	.....	.....	.....	.....	.....	.....	.....	[4] 14
No. 16.....	8	14	8.0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[4] 14
No. 17.....	6	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[5] 20
No. 18.....	8	14	6.0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[6] 18
No. 19.....	16	6	16.0	6.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Remaining not in LC's.....	.....	.....	3.4	0	0	0	3.4	0	0	0	0	0	0	0	0	0	0	0	.....

[1] Northeast of Philadelphia.
[2] Northwest of Philadelphia.
[3] West of Philadelphia.
[4] Westsouthwest of Philadelphia.
[5] Chester plus 2 from Ridley.
[6] Ridley.

CHART 2.—*Solution II: Home districts of students attending Learning Centers*

Learning Center	Total number of students (thousands)																		
	Negro	White	District 1		District 2		District 3		District 4		District 5		District 6		District 7		District 8		Outside Philadelphia, Negro and white
			Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	
Total	275,000		34.4	5.7	28.1	4.8	13.4	8.7	38.7	5.8	14.1	15.1	17.0	18.7	4.3	22.1	0.5	34.7	.....
No. 1	12	7	.....	.....	6.0	3.0	6.0	4.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
No. 2	12	7	.....	.....	6.0	2.0	6.0	5.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
No. 3	8	12	.....	.....	.....	.....	.....	.....	.....	.....	8.0	12.0	.....	.....	.....	.....	.....	.....	.....
No. 4	4	8	.....	.....	.....	.....	.....	.....	.....	.....	4.0	3.0	.....	.....	0	5.0	.....	.....	.....
No. 5	6	14	.....	.....	.....	.....	.....	.....	.....	.....	2.0	0	.....	.....	4.0	0	.5	14.0	.....
No. 6	14	6	14.0	6.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
No. 7	13	7	.....	.....	.....	.....	.....	.....	13.0	0	.....	.....	0	7.0	.....	.....	.....	.....	.....
No. 8	6	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	[1] 14
No. 9	6	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	[1] 14
No. 10	5	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.0	12.0	.....	.....	.....	.....	.....
No. 11	6	8	.....	.....	.....	.....	.....	.....	6.0	3.0	.....	.....	.....	.....	.....	.....	.....	.....	[2] 5
No. 12	6	8	.....	.....	.....	.....	.....	.....	6.0	3.0	.....	.....	.....	.....	.....	.....	.....	.....	[2] 5
No. 13	6	14	6.0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[3] 14
No. 14	6	14	6.0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[3] 14
No. 15	6	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[4] 20
Remaining, not in LC's	.....	.....	8.4	0	16.1	0	1.4	0	13.7	0	0	0	0	0	0	17.1	0	20.7	.....

[1] North of Philadelphia.
[2] West of Philadelphia.
[3] Southwest of Philadelphia.
[4] Chester.

CHART 3.—*Solution I: Home districts of students attending Learning Centers*

Learning center	Total number of students (thousands)																		
			District 1		District 2		District 3		District 4		District 5		District 6		District 7		District 8		Outside Philadelphia, Negro and white
	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	
Total	386,000		34.4	5.7	28.1	4.8	13.4	8.7	38.7	5.8	14.1	15.1	17.0	18.7	4.3	22.1	0.5	34.7	.....
No. 1	**10**	**10**	.....	.....	**10.0**	4.8	0	3.2	.....	.....	.....	.....	.....	**2.0**	.....	.....	.....	.....	.....
No. 2	**10**	**10**	.....	.....	**10.0**	0	0	5.5	.....	.....	0	2.3	.....	**2.0**	.....	.....	.....	.....	.....
No. 3	10	10	.....	.....	4.0	0	3.0	0	3.0	0	0	10.0	.....	.....	.....	.....	.....	.....	.....
No. 4	10	10	.....	.....	.....	.....	7.0	0	.....	.....	3.0	3.0	.....	.....	0	7.0	.....	.....	.....
No. 5	8	12	.....	.....	.....	.....	.....	.....	8.0	0	.....	.....	.....	.....	0	12.0	.....	.....	.....
No. 6	6	14	.....	.....	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	0	3.0	0	11.0	.....
No. 7	5	15	.....	.....	.....	.....	.....	.....	.....	.....	4.0	0	.....	.....	1.0	0	0	14.0	.....
No. 8	5	15	.....	.....	.....	.....	.....	.....	.....	.....	1.0	0	.....	.....	3.3	.....	.5	9.0	[1] 5
No. 9	6	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	[2] 14
No. 10	6	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	[2] 14
No. 11	**10**	**10**	.....	.....	**4.0**	.....	.....	.....	1.0	0	.....	.....	5.0	**10.0**	.....	.....	.....	.....	.....
No. 12	10	10	.....	.....	.....	.....	.....	.....	10.0	6.0	.....	.....	0	4.0	.....	.....	.....	.....	.....
No. 13	6	14	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	.....	.....	.....	.....	[3] 14
No. 14	6	14	.....	.....	.....	.....	.....	.....	6.0	0	.....	.....	.....	.....	.....	.....	.....	.....	[3] 14
No. 15	6	14	1.0	0	.....	.....	.....	.....	5.0	0	.....	.....	.....	.....	.....	.....	.....	.....	[4] 14
No. 16	8	14	8.0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[4] 14
No. 17	**10**	**11**	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[5] **21**
No. 18	**11**	**12**	**11.0**	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[6] **23**
No. 19	**11**	**11**	**11.0**	6.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[6] 5
Remaining, not in LC's	.....	.....	**0**	0	0	0	3.4	0	0	0	0	0	0	0	0	0	0	0	.....

Figures in bold show changes from figures presented in Chart 1.

[1] Northeast of Philadelphia.
[2] Northwest of Philadelphia.
[3] Western Philadelphia.
[4] Westsouthwest Philadelphia.
[5] Chester plus 2 from Ridley.
[6] Ridley.

CHART 4.—*Solution II: Home districts of students attending Learning Centers*

[Maximum enrollment of Negroes in each school not more than 50 percent]

Learning center	Total number of students (thousands)																		
	Negro	White	District 1		District 2		District 3		District 4		District 5		District 6		District 7		District 8		Outside Philadelphia
			Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	
Total	275,000		34.4	5.7	28.1	4.8	13.4	8.7	38.7	5.8	14.1	15.1	17.0	18.7	4.3	22.1	0.5	34.7	
No. 1	**10**	**10**			6.0	3.0	**4.0**	**4.0**											[1] 3
No. 2	**10**	**10**			6.0	2.0	**4.0**	5.0				**3.0**							
No. 3	**10**	**10**					**2.0**				8.0	**10.0**							
No. 4	4	7									4.0	**2.0**			0	5.0			
No. 5	6	14									2.0	0			4.0	0	.5	14.0	
No. 6	**10**	**10**	**10.0**	6.0															[1] 4
No. 7	**9**	**10**							**9.0**	0			0	**10.0**					
No. 8	6	14											6.0	0					[2] 14
No. 9	6	14											6.0	0					[2] 14
No. 10	**9**	**9**							**4.0**				5.0	**9.0**					
No. 11	6	8							6.0	3.0									[3] 5
No. 12	6	8							6.0	3.0									[3] 5
No. 13	**8**	**12**	**8.0**	0															[4] **12**
No. 14	**8**	**12**	**8.0**	0															[4] **12**
No. 15	6	14																	[5] 20
Remaining			8.4	0	16.1	0	3.4	0	13.7	0	0	0	0	0	0	17.1	0	20.7	

Figures in bold show changes from figures presented in Chart 2.
[1] Southeast of Philadelphia.
[2] North of Philadelphia.
[3] West of Philadelphia.
[4] Southwest of Philadelphia.
[5] Chester.

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