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The Ohio State University, Ph.D., 1976
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AN ANALYSIS OF THE EFFECT OF LEGAL, DEMOGRAPHIC
AND SOCIO-CULTURAL VARIABLES ON EQUAL
EDUCATIONAL OPPORTUNITY

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

Marshall D. Amesquita, B.S., M.A.

* * * * *

The Ohio State University

1975

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Robert P. Bargar
Advisor
Dept. of Educational Development
This study is dedicated to the memory
of Dr. Charles A. Glatt, my major advisor,
who provided the impetus for this study
and helped guide its development.
ACKNOWLEDGMENTS

To a large extent, this study owes its existence to the helpful guidance and expertise of Dr. Charles A. Glatt, who was able to help me conceptualize the study and guide its development. His patience and critical review are deeply appreciated.

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Acknowledgment is given to Dr. Herman Peters and Dr. Robert Lange, members of the reading committee, for their suggestions and support.

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Special thanks are owed to my wife, Edy, whose skillful typing and critical review contributed greatly to the study.
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Studies in Guidance Administration. Professor Anthony Riccio
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Chapter I
INTRODUCTION

Through the countless testimonies of school authorities in numerous school desegregation cases reaching the various federal courts it has become apparent that many school systems do not have the capacity to digest the numerous findings of educational research regarding school desegregation nor the ability to act upon the collective interpretations of school desegregation cases decided by the federal judicial system. In part, this may be attributable to the unavailability of many research reports and court findings. Weinberg, in his appraisal of desegregation research, reaches the conclusion that much of the research that has been done in the area of school desegregation remains unpublished or is circulated only within narrow circles of experts.¹ Compounding the problem is the fact that very few institutions of higher education, whose responsibility it is to train school administrators and planners, are dealing effectively with the issue of school desegregation. As a result many school officials are finding themselves ill prepared for what has become increasingly

inevitable - the elimination of dual school systems.

The number of school systems finding themselves involved in school desegregation suits is growing at an exponential rate. The inability of many schools to circumvent judicial involvement in their school system may be due in part to the lack of proper demographic planning. Thomas Pettigrew in Race and the Social Sciences emphasizes the fact that "the critical context for any intelligent approach to the issue of providing equal educational opportunities in public school systems is basically demographic." Unfortunately even when academic demographic research has produced findings directly relevant to policy formation, they are often in forms which are not understandable or usable by policy makers. Not only have the courts placed an emphasis on demographic and socio-cultural variables in determining the extent of unequal educational opportunities, but the results of educational research have shown these variables to be important in maximizing the effectiveness of schools as measured by standardized achievement tests. One of the most highly reliable

\begin{footnotesize}
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\item John C. Hogan, The Schools, the Courts, and the Public Interest (Lexington, Massachusetts: Lexington Books, 1974), 7.
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sources of demographic data is the decennial census tract data, yet
the use of such data for educational purposes is rare. Because these
data which are readily available to urban school systems are not
frequently used, schools have been unable to take full advantage of
factors which could improve the efficiency of the school system.

The failure to take into account variables of the community
when formulating attendance boundaries for schools has also acceler­
ated the problem of unequal educational opportunities. In their classic
report, Coleman and his colleagues discovered that factors outside the
school account for more variation in achievement scores than the
traditional school factors such as facilities, student-teacher ratios,
etc. Jencks came to the same basic conclusion when he discovered
that family background characteristics accounted for 35 percent of the
variance in students' test scores.

Although data relevant to decision making involving the pro­
vision of equal educational opportunities in public school systems are

---

5 Kenneth Brooks, "Taxonomies of Data Sources Available for
Comprehensive Educational Planning" (unpublished Ph.D. dissertation,
Ohio State University, 1972), 79.

6 James Coleman, et al., Equality of Educational Opportunity

7 Christopher Jencks, et al., Inequality: A Reassessment of
the Effects of Family and Schooling in America (New York: Basic
becoming more readily available, a gap exists in providing school officials with information that is in a usable form. Various governmental offices compile data that could facilitate planning decisions including the U. S. Bureau of the Census, State Vital Statistics, State Educational Departments, State Educational Associations and Local Educational Associations. Despite efforts by the federal government to provide recommendations for school planning and regional studies of census data, an adequate contextual data base describing demographic and socio-cultural factors necessary for planning equal educational opportunities for all children in public school systems is lacking.

This study deals with two separate problem statements -

1) What are the legal determinants resulting from the federal court system that have an effect on the policy formation of school boards with respect to equal educational opportunities? and 2) How can demographic and socio-cultural variables of school and community census data be used in planning for equal educational opportunities?

Purpose of the Study

One of the main purposes of the study was to outline the legal concept of equal educational opportunity by chronologically tracing the changing concepts and legal standards of school desegregation from 1954 to the present. Significant legal determinants were derived from federal District, Appellate and Supreme Court rulings.
A second purpose of the study was to conduct an illustrative case study of census data from the Columbus, Ohio public school system and the surrounding Franklin County area. This was accomplished by providing profiles of the city school system and the community of Franklin County from a geographic and demographic point of view.

It is felt that by identifying where geographic and quantitative differences exist among demographic and socio-cultural variables related to educational opportunity, both in the school and in the community, more efficient planning efforts can be instituted to facilitate the achievement of equal educational opportunities.

Assumptions

The assumption is made that the measurement of equal educational opportunity should consist of total school inputs and outcomes with achievement scores being only one indicator of school outcomes.

It is further assumed that the measurements of the school census data are accurate representations of the sixth grade population attending Columbus public schools. Since the data from the census tracts of Franklin County were derived from samples, it is also assumed that the measurements obtained by the U.S. Census Bureau accurately reflect the population parameters of each tract. It is
further assumed that census tracts in fact are distinct residential neighborhoods.

For the purposes of this study minority can be equated with blacks because of the small number of persons within Franklin County who belong to other commonly known minority groups. Also the term neighborhood, again for the purposes of this study, can be equated to census tract based upon the fact that census tracts are created by local committees so as to be relatively uniform with respect to population characteristics, economic status, and living conditions.

**Definition of Terms**

*De jure segregation* - segregation resulting from the action or inaction of a school board, acting as an arm of the state government, or state government itself, with the foreseeable knowledge that such actions or inactions would result in segregated schools.

*De facto segregation* - segregation of schools not resulting from the actions or inactions of school boards, acting as an arm of state government, or state government itself (such as site selection, construction of new buildings) but solely from housing patterns.

*Desegregated school* - a school whose student population reflects with minor variation the proportion of minority to majority students in the entire school population of the community.
Racially isolated school - a school whose student population is such that less than ten percent of its population consists of a majority or minority race.

Racially tipping school - a school whose student population consists of a minority group population of more than 30 percent minority and the trend is that the proportion of minorities is increasing.

Racially identifiable school - a school whose student population consists of a minority group population greater than 50 percent.

Integrated neighborhood - a neighborhood whose population ratio approximates the proportion of minority to majority residents in the entire metropolitan area.

Racially isolated neighborhood - a neighborhood whose population is such that less than five percent of its population consists of a majority or minority race.

Racially tipping neighborhood - a neighborhood whose population consists of a minority group population of more than 30 percent minority and the trend is that the proportion of minorities is increasing.

Racially identifiable neighborhood - a neighborhood whose population consists of a minority group population greater than 50 percent.
Equal educational opportunity - the provision of educational processes where each child of school age residing within a school district has equal access to the educative resources of the district essential to his or her needs and abilities regardless of racial or socio-economic background.

Limitations of the Study

The generalizability of the results of the geographical maps and data analyses are limited to the Columbus public school system and the community of Franklin County. Although many similarities may exist among different metropolitan areas it is not the intent of this study to make such comparisons.

Since the community profile relies heavily upon census tract data which were collected nearly five years ago, some of the estimations of mean values for the various dependent measures may have changed slightly. Variations of differences between groups may also have occurred if a differential rate of change has affected the dependent measure for the different groups being tested.

Because of the cross-sectional design of the data analyses, the conclusions that can be drawn from statistical tests are further limited to the time period in which the data were collected.
Although the judicial analyses have widespread implications for most school systems because they involve the interpretations of federal courts, the research related to the legal determinants of equal educational opportunity did not attempt to analyze legal decisions of state court systems, particularly the Ohio state judicial system. As a result many legal interpretations that have applicability to Ohio schools have not been researched.
Chapter II

REVIEW OF RELATED LITERATURE

The concept of equal educational opportunity, although ranking as one of the foremost ideals of American education, has probably been one of the most difficult concepts to actualize. Varying perceptions of the definition of equal educational opportunities, unwillingness to change, racist attitudes and the lack of conclusive research findings to name just a few, have been attributed to the fact that equality in education still remains only a goal in many school systems throughout the country.

Lacking any alternatives, victims of what was felt to be an inferior education began to test the constitutionality of many educational practices through the judicial system. The District, Appellate and Supreme courts of the United States have become increasingly involved in interpreting the legal definitions of equal educational opportunities. Initially, the applicability of legal interpretations rendered by the various courts was restricted to the southern and border states which had practiced de jure segregation in the public schools. In its slow and deliberate case by case approach, the federal judicial system began to set the parameters for school desegregation, considered to be the sine qua non of equal educational
opportunity. At the same time, although at a much slower pace, the courts began to expand the definition of de jure segregation to the point that non-southern states could no longer hide behind the facade of de facto segregation. As school desegregation accelerated in the south, plaintiffs began to shift their focus toward the elimination of dual school systems in northern and western states. Collectively, the rulings of various federal courts have done more than any other single force in activating change and protecting fundamental constitutional rights of equal educational opportunities.

Today, virtually no school system in the country remains immune from the possibility of court intervention. In its analysis of the legal shift toward de facto segregation, the American School Board Journal warned that any major city school board with racially identifiable schools in its district should be nervous and that if any of these school boards have used segregative policies affecting any school in their district, those boards may find themselves in court and in trouble.1 In a recent survey of public reactions toward schools, problems arising out of school integration were cited as the nation's greatest public school problem, next to financial matters.2


In addition to the impetus provided by the legal interpretations of the courts, school desegregation has also received much attention by educational and sociological researchers. Although much of the research involving desegregation lacks the sophisticated controls of pure experimental design, enough work has been done in the area to provide school authorities with some insight to the educational advantages and disadvantages of a desegregated school experience, in addition to identifying those variables which seem to have an impact on raising school achievement levels.

For most Americans, public education has been a primary means for moving toward equality in terms of occupational and social mobility, economic advancement, and quality of life. Mushkin points out that there are many diverse paths toward economic advancement for an individual, some of which are not yet fully defined, but the primary route is clearly education.\(^3\) Strickman reiterates this view when he stated that although school systems are incapable of bearing the entire burden of racial justice and economic mobility, they must play an important role in the realization of these goals.\(^4\) It can be

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clearly seen that one of the key elements to equality of opportunity in employment, housing, and a host of other socio-cultural variables is equality of educational opportunities.

Research related to equal educational opportunity has grown exponentially in the past few decades due in part to the Brown Supreme Court decision in 1954 and the passage of the 1964 Civil Rights Act. During this period the concept of equal educational opportunity has broadened both from a legal and a social scientific point of view. Similarly, the measurements of equal educational opportunity and those variables related to it have expanded to include not only the traditional school input measures such as facilities, equipment and materials, but also school outcome measures such as achievement scores and environmentally related variables.

To provide the conceptual framework for this study four areas related to equal educational opportunity have been reviewed. The first area deals with the relationship of planning to equal educational opportunity; the second outlines the role that state and federal laws have had on the concept of equal educational opportunity; the third area focuses on the demographic aspects of equal educational opportunity and the last area is concerned with the socio-cultural variables related to equal educational opportunity.
A review of the literature revealed that specific planning efforts concerned with equal educational opportunities, for the most part remain unpublished. Those that are available have such limited generalizability because of the circumstances surrounding the creation of the plan and the singularity of individual metropolitan areas. Those demographic and socio-cultural variables related to the environment outside the school are usually ignored when studying equal educational opportunity in a metropolitan area, even though many research efforts have indicated relationships of demographic and environmentally related variables to equal educational opportunities, especially with respect to academic achievement.

Although several studies have outlined the results of major Supreme Court cases involving de jure school segregation, no studies have systematically included lower federal court decisions, many of which have set legal precedents and have shaped the course of future Supreme Court decisions.

Finally, no studies were found that outlined the relationships of legal, demographic and environmentally related socio-cultural variables and their respective interrelationships to equal educational opportunities.
Educational Planning and Equal Educational Opportunity

In a doctoral study relating behavioral patterns of school superintendents to the process of school desegregation, it was discovered that the amount of planning prior to desegregating was a key variable in effectively achieving a unitary school system and had a positive relationship to the amount of community support and the ease with which the transition took place. Despite the obvious importance of planning to something as complex as school desegregation, many problems related to efficient planning has been discovered. Brooks, in his attempt to develop a taxonomy of data sources available for educational planning, came to the conclusion that one of the major pitfalls of the "state of the art" of educational planning was the fact that educators did not appreciate planning. Leu attributes this lack of appreciation to a combination of inadequate training in universities and an inability to define what educational and external data are significant or relevant to pertinent planning.

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6 Kenneth Brooks, "Taxonomies of Data Sources Available for Comprehensive Educational Planning" (unpublished PhD dissertation, Ohio State University, 1972), 143.

Planning within an urban structure, the structure within which the vast majority of school desegregation takes place, is also enormously complicated by inherent sociological, economic, and political considerations. Further complicating the entire situation is the fact that there is no firm agreement on what planning is and that a "theory of planning" is lacking and even less so, a "theory of educational planning".

Although a formal theory of educational planning is lacking, conceptual frameworks outlining the purposes of educational planning abound. Boyer delineated two types of planning according to the degree of control assumed over variables in the present and future environment:

1. Expansive planning - a type of planning which deals with adjusting people and institutions to changes in the environment. Based on the prediction of trends, this type of planning is the most prevalent form of social planning.

2. Reconstructive planning - a type of planning which tries to

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adjust trends to people and their needs.  

At the current stage of desegregation in the United States, most desegregation plans can be perceived to be of the expansive type, mainly reactions to the change of environments imposed upon school systems by a court order to desegregate. Those schools which choose to form a unitary school system voluntarily, more closely approximate the reconstructive type of planning.

Steiner dichotomizes planning into two forms: strategic planning and tactical planning. Basic differences in scope and time-projections separate the two. Strategic planning is seen as the process of identifying the major objectives, missions or purposes of an organization in addition to the determination of policies and strategies governing the use, acquisition and disposition of resources needed to achieve the objectives. Tactical planning, on the other hand is less subjective, more detailed and more functionally oriented. In relation to strategic planning, tactical planning is more short-ranged. Applying Steiner's typology of planning to desegregation, indicates that for any plan to be successful, a combination of tactical and strategic

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planning is necessary. Chesswas views strategic planning as an essential and continual process with the study and extrapolation of past trends as an important part of planning.

A third approach to planning, using comprehensiveness as the key variable and utilizing a systems approach, is described by Kaufman. Kaufman outlines three modes of planning:

1. **Design-process mode** - assumes little or nothing concerning the validity of the present system and begins with a needs assessment, includes the development of a program and concludes with an evaluation of the implemented program.

2. **Solution-implementation mode** - assumes a valid need exists and focuses on the identification and use of solutions. This mode makes use of innovations made in other systems and the application of these solutions to the local system.

3. **Description mode** - attempts to identify what is or what should be, but does not deal with alternative strategies to ameliorate identified needs. This mode emphasizes

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existing or desired situation.

The three modes of planning described by Kaufman would have differential impacts on a school system involved in desegregation planning depending on the conditions under which planning efforts emanated. For example, a school system which voluntarily engages in desegregating its schools would emphasize the solution-implementation mode of planning. A school system under court review would initially focus its planning efforts on the description mode and depending on the outcome of litigation may shift its planning toward the solution-implementation mode. Still a third category of schools which are not under court review or have chosen to voluntarily desegregate, may choose to study the issue of desegregation using the design-process mode.

Stufflebeam makes use of evaluation data to facilitate planning decisions in the CIPP evaluation model. Of the four types of evaluation represented in the CIPP model (context, input, process, and product), the primary purpose of context evaluation is to serve planning decisions. Context evaluation provides a rationale for the


determination of objectives. Specifically, context evaluation aids in the planning process by defining the relevant environment, describing the desired and actual conditions pertaining to the environment, identifying unmet and unused opportunities and diagnosing the barriers that prevent needs from being met and opportunities from being used.

Input evaluation serves structuring decisions to determine planning designs. Process evaluation serves implementing decisions to control planning operations and product evaluation serves recycling decisions to judge and react to planning attainments. For most school systems, context evaluation would serve as the foundation for any desegregation plan. Planning decisions can be made after the environment has been described through context evaluation. Input evaluation could be exemplified in determining the appropriate detailed strategy to be used in eliminating a dual system of schools. The implementation of the desired strategy is monitored using process evaluation and the success or failure of the strategy is assessed through product evaluation.

Definitions of planning generally contain three elements according to Anderson and Bowman. These elements include an orientation to the future, an orientation to action rather than acquiring knowledge or communicating information, and the preparation or designation of a deliberate endeavor. According to this definition planning is neither

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15 C. Anderson and M. Bowman, op. cit., 12.
predictive nor is it equated to implementation, but is a process of preparing a set of decisions for action in the future. Educational planning is divided into three aspects - manpower planning; social democratization (i.e. equality of educational opportunity); and efficiency of education.

Coombs perceives educational planning as having three major new dimensions - comprehensiveness of coverage; a much longer time perspective; and a more conscious and detailed integration with national economic and social development.

The relationships of demographic factors and the external environment surrounding the school has taken added importance in educational planning. This is evidenced by the following rationale for long range planning provided by California's Bureau of School Planning:

(1) to gather and organize factual information about a community from which present and future educational program needs can be determined.

(2) to more accurately estimate pupil population in regard to numbers, ages, socioeconomic backgrounds and ethnic composition for which faculties may be planned and provided.

16 Ibid., 14.

17 P. Coombs, "What Do We Still Need to Know About Educational Planning?" World Yearbook of Education, (1967), 59.
(3) to coordinate a program of total school and community
planning.  

Leu supports the perception of the necessity for educational planning to be broadly based.  

Morphet, Jesser and Ludka reiterate this point, emphasizing that educational planning cannot be isolated from the cultural, economic and political aspects of the social system.  

Because of the comprehensiveness of planning, Leu advocates a shift from using the historically restrictive use of "internal" data obtainable through the school curriculum, school personnel, students, school finance, and school buildings to "external" data located outside the formal educational system, that have a more significant impact on education.  

The unit of analysis for purposes of educational planning has also been a topic of concern among educational planners, especially when monitoring variables related to school desegregation.  

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19 Leu, loc. cit.  


21 Leu, loc. cit.
advocates using county boundaries instead of local school district boundaries when making long range school enrollment projections due to the stability of the country's geographical boundaries. In his study of racial segregation in Mississippi, Lowry also chose the county as a unit of comparison, but cautioned making generalizations about a county due to the variability of segregation which could occur within elements of the county.

One of the most useful units of information for school planning purposes is the census tract. Census tract information has been proven practical in creating alternate solutions to social needs, as witnessed by its application following the riots in Watts, Los Angeles. In many instances census tracts provide the only information about the city in general, and the black community in particular. Thompson and Agocs view census data as the best available for use in ethnic


studies. Although the United States Census Bureau Reports have been shown to have limited access, census data is perceived as having high quality and high usefulness by school planners. The State Department of Education in California has endorsed the use of census tracts by recommending their use for future correlation and planning purposes. In an effort to provide historical, continuous and comparative data, some school districts have already incorporated census tract information for planning purposes. Census information has been considered as an administrative unit for the planning and implementation of educational policy on a national scale.

Although few actual desegregation plans have been published, those that have, consistently fail to incorporate demographic and environmentally related information available in census tract data in their decisions affecting equal educational opportunities.


27 Brooks, op. cit., 79.

28 California State Department of Education, loc. cit.

29 Leu, loc. cit.

30 L. P. Strickman, "Desegregation: The Metropolitan Concept," The Urban Review, 6, No. 1 (1972), 22.
Summary

The role of educational planning and equal educational opportunity is universally acknowledged as having a close relationship to each other. Because of the multi-faceted nature of both educational planning and equality of educational opportunity, no one planning design can be considered the best approach. Two elements of educational planning, however, seem to surface as important and essential components of dealing with equality of educational opportunity - providing an adequate contextual base for planning purposes and including community factors in the planning process. Census tracts have been shown to be a useful unit of analysis in monitoring and planning for equal educational opportunity.

Legal Variables and Equal Educational Opportunity

The concept of equal educational opportunity has been shaped to a large extent by executive initiative, legislative acts and subsequent judicial interpretations of such acts by both state governments and the federal government. Traditionally, under the auspices of the Tenth Amendment to the Constitution which gave to the states those powers not delegated to the United States, the federal court system left litigation related to educational matters up to the respective state judicial systems. The responsibility for education, and therefore equal educational opportunity still lies with state and local governments.
However, only a few states have taken a leadership role in reducing or ending racial imbalance in their public schools.  

In 1960, New York was the first state to declare that racial segregation was educationally harmful and must not be allowed to exist, whatever its cause. The New York law was the result of a commissioned study of racial isolation in the state of New York, commonly known as the Allen Report. Based upon the Allen Report Illinois passed similar legislation in 1971 and added the condition of an annual data reporting mechanism with the threat of withdrawal of funding for non-compliance. California, another leader in enacting state legislation to reduce racial imbalance in the public schools, requires school districts to monitor trends and rates of population change among racial and ethnic groups in an effort to prevent segregated schools.


Concurrent with individual state legislative action to promote equal educational opportunities in public schools, the federal government became more involved in legislation affecting the operation of dual school systems. One of the major federal legislative enactments passed during this time was the Civil Rights Act of 1964, which allows the executive branch of the federal government to have a leadership role in eliminating segregated schools. Title IV of the Civil Rights Act authorizes the Department of Justice to file suits ordering public schools to desegregate and also allows the Department of Health, Education and Welfare to provide technical assistance to states and school districts in the process of desegregating their schools. Title VI authorizes the federal government to withdraw any funds from any public school program or activity which discriminates on the basis of race, color or national origin. Title IX of the Act gives the Justice Department the power to intervene in school desegregation suits on behalf of the plaintiff. Another federal enactment, Section 709 of the Emergency School Aid Act of 1972, authorized the expenditure of 100 million dollars for metropolitan planning and support of desegregation plans which would place inner city minority children in suburban schools.

Despite the apparent legislative efforts to reduce racial segregation in the public schools, Levine comes to the conclusion that the burden of furthering equal educational opportunity has been mostly
abandoned by the executive and legislative branches of the federal government and now rests primarily with the judicial branch.

Levine's conclusion is supported by a number of incidences of attempts to erode the original intent of the 1964 Civil Rights Act. In addition, Justice Department initiatives under Title VI of the Civil Rights Act of 1964 have virtually come to a stop since 1970.

The 1954 Supreme Court ruling, that separate schools for separate races was unconstitutional, marked the turning point of the federal attitude that public education was the sole responsibility of the states. From this point on federal courts shifted their attention to individual rights guaranteed by the Constitution, using primarily the equal protection clause of the Fourteenth Amendment and to a lesser extent the due process clause of the Fifth Amendment as the legal standards to apply in matters related to equal educational opportunity. With the increased level of federal court intervention in the administrative policies of public schools, a working knowledge of federal


\[37\] Mercer, op. cit., 282.

court rulings related to equal educational opportunity takes on added significance. Legal research, legal interpretations and legal guidelines are becoming more important to school administrators and planners.

Shalala and Kelly stress the need for educational leaders to focus their attention on the judicial politics of equal educational opportunity rather than politics of an administrative or legislative nature. Despite the obvious importance of judicial knowledge pertaining to equality of educational opportunity, relatively few studies have comprehensively analyzed how the cumulative findings of the federal court system affect decisions made by local school authorities. Hogan provides one of the most extensive overviews of how the role of the federal courts have affected matters of race and education. Although Hogan discusses the results of many appellate court rulings, the main focus of Hogan's interpretation resides in the Supreme Court interpretations of four cases - Richmond, Detroit, Atlanta and Denver. Bolmeier outlines highlights of several Supreme Court rulings related to equal educational opportunity, but is limited in the number of issues

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related to school desegregation. Fellman also presents a limited number of Supreme Court decisions related to school desegregation in his analysis of various Supreme Court rulings in the area of education.

Several studies have been done relating federal court rulings to specific content areas. Bolner and Shanley use an historical approach of District, Appellate and Supreme Court cases to show how the federal judicial system has treated the issue of busing to achieve racial balance. The implications of metropolitanism as interpreted by various Supreme Court decisions are analyzed by Chachkin. Bloch shows how the interpretation of the Fourteenth Amendment in the federal courts has shaped the definitions of de facto and de jure segregation. Wright also studied the role of the federal courts in defining

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de facto segregation and concluded that a definitive legal ruling on the issue of de facto segregation may be sometime in the future. A similar scholarly study of the court's view of racial imbalance is provided by Fiss. Glatt uses significant Supreme Court rulings as a foundation for a political-legal model for implementing desegregation.

Several brief synopses of the major judicial decisions relating to school desegregation have been published. One of the most succinct reports is a listing of twelve legal doctrines from federal court cases decided between 1964 and 1972. A brief historical review of post-Brown Supreme Court cases impinging upon school desegregation is presented by the National Educational Association. A similar study

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has been done by Carter. Another historical study which emphasizes the more recent Supreme Court rulings has been written by Hogan.

Summary

Although several studies of federal court interpretations of equal educational opportunity have been conducted, very few have discussed the results of district and appellate court findings. In addition no studies have systematically related how educational planning, demography and other socio-cultural variables have been viewed by the courts. Several studies have provided historical perspectives of major school desegregation cases, but no study has presented the results of federal court decisions regarding school desegregation in a systematic, chronological method.

Demographic Variables and Equal Educational Opportunity

"Formal demography" is considered to consist of studies related to the size, distribution, structure, and change of


populations. Demography, as defined above, has been viewed as a principal cause of de facto segregated schools typically found in northern and western states, primarily due to segregated housing patterns. Because of the importance of housing patterns and their consequent effect on school attendance patterns, the use of the demographic background of a city is considered to be an essential step toward providing equal educational opportunities. In fact, the New York City Board of Education, in its recommendations for quality integrated education stressed the use of demographic factors in the construction of desegregation plans.

Despite the acknowledged importance of demography to educational planners, Olson draws a rather dire conclusion in his statement that

Within educational boundaries, it would appear that American educators have few systematic methods with which to analyze environmental and population changes

that have either direct or indirect influences upon public education. 56

One of the major reasons that systematic methods are lacking is due in part to the fact that each school system is unique and therefore requires unique consideration. 57  Despite the limitation of a school system's unique demographic structure, many studies dealing with racial population characteristics have widespread generalizability.

In a study of national racial patterns, Dodson cites the advent of the mechanical cotton picker and related agricultural advancements as the major cause of many blacks to leave the South. 58  Between 1940 and 1950 the South lost 320,788 in black out-migration and the following decade, the peak of the exodus, witnessed a net loss of over one million blacks (or approximately ten percent of the total southern population). 59  For the most part these southern blacks were attracted


59 Ibid.
to the major metropolitan industrial areas of the North.

In addition to the massive northerly migration, blacks in the last three decades have changed their lifestyles from primarily rural in 1940, when only 47 percent of the total of 5,840,000 blacks lived in a metropolitan area, to an urban life in which 70 percent of all blacks lived in metropolitan areas in 1970. Naturally, such massive changes in the nation's population distribution were destined to create problems in school attendance patterns, particularly in major northern metropolitan areas.

Based on the principal theory of urban growth in which socioeconomic gradients of residential land use apply, blacks because of their low socioeconomic status were forced to live in and near the central business district. With the confinement of blacks to central business districts in the northern cities, ghettos, in the sense of ethnic enclaves began to develop, which ultimately set a national pattern of racial population distribution in major urban areas.

The growth of black ghettos has been explained on the basis of blacks being perceived as a new immigrant group, therefore being forced into following the residential patterns of immigrant groups

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60 Ibid.
preceding them, and also as a distinctive form of race relations between blacks and whites. Residential patterns within ghettos seem to be determined largely by socioeconomic level based upon income differences within the ghetto community. Rose attributes the spatial patterns of ghetto clusters to such factors as heterogeneity of housing costs in contiguous space, patterns of employment, the stage of ghetto development, the size of the black population, and public policy. He further states that no single generalizations can be made to explain the pattern of ghetto distribution within central cities.

In one of the most comprehensive studies of racial demography, Taeuber and Taeuber came to the conclusion that a high degree of residential segregation is universal in American cities, regardless of type of city or suburb, geographical location, or level of Negro population. Clemence came to the same basic conclusion of the universality of segregation in American cities and found in addition


65 Ibid.

that blacks are more segregated residentially than Orientals, Mexican Americans, Puerto Ricans or any other nationality group. Harries also found that the central city-suburb contrast is becoming more racially marked and the nonwhite population size and proportion have increased both in the central cities and the suburbs. Green, in his analysis of northern school desegregation, reports that in every major city a "black belt" or series of "black areas" exist which are surrounded by totally white areas. The social isolation of northern urban blacks and whites, according to Green, is far more complete than it ever was in the rural South.

Population patterns within a metropolitan area have a signifi-
cant impact on the structure of the school attendance patterns among the various schools in the area, the number of schools being construct-
ed, and their location. Accurate predictions of student growth and movement are essential to efficient school planning. Since this type of population data is continually changing, information must be updated


periodically if school facilities and services are to keep pace with changing student population patterns. The concept of desegregated schools adds further impetus to the need for monitoring population trends, with the additional concern of having to be able to predict trends based upon race.

Jaffe, in a study of enrollment projection techniques, indicates three areas which are particularly problematic for school planners. These include the extent and direction of internal migration, the levels of and changes in the birth rate, and the extent of attendance in the public schools, including trends in private school enrollment and dropout patterns. The technique most often used by schools in projecting school enrollments is the cohort-survival or grade persistence method in which an historical series of enrollment patterns by individual grades is projected in grade-to-grade survival ratios. Jaffe argues that the factor of race should be considered in computing survival rates, indicating that in the South, blacks have a lower survival rate than whites due to high out-migration rates. Holmes believes that analyses of group characteristics and the reasons for choice of

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71 Ibid.

72 Ibid.
areas in which to settle need to be conducted before any specific educational solutions can be proposed.

In a report of the United States Commission on Civil Rights it was found that larger areas of racial concentration and rapid racial migration patterns in peripheral areas have made the reduction of racial imbalance in public schools difficult. According to Havighurst, when a racial ghetto grows to the size of 1,000 to 1,500 school children, the redistribution of minority children to achieve racial balance becomes increasingly difficult.

Another factor which affects school attendance patterns is the fertility rate. The growth of the black population is correspondingly higher than that of whites because of a higher fertility rate. Even though a large percentage of the South's black population moved northward, between 1940 and 1960, the southern black population increased by 1.4 million, while the black population of the North increased by

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75 R. Havighurst, "These Integration Approaches Work, Sometimes," Nation's Schools, 80, No. 3 (1967), 73.
4.6 million, because of fertility rate alone. However, due to the stability of birth rates across the nation, fertility does not pose as great a threat to prediction of enrollment patterns as do migration patterns, which can vary significantly.

In a national study of school age migratory patterns, it was discovered that 17.4 percent of all children between the ages of 5 and 17 had moved. One third of these moves involved a migration to a new county or state. Each year one child in every 16 of school age moves to a different county and another one child in 10 changes residence within the same county. From the point of view of maintaining racial balance within the school system, it can easily be seen that migratory patterns play a significant role.

Lee has summarized four factors which enter into the decision to migrate: (a) factors associated with the area of origin, (b) factors associated with the area of destination, (c) intervening obstacles, and (d) personal factors, but emphasizes the fact that the decision to move

77 Green, op. cit., 216.
78 Jaffe, loc. cit.
80 Jaffe, loc. cit.
is often highly irrational.  

In an historical assessment of black migration, Jones shows that education in the form of good schools, was a very important reason for many blacks to migrate to the city, a combination of the second and fourth factors of Lee's migration model.

When migration patterns are of an intraurban nature, it becomes highly difficult to make specific predictions due to the many contributing variables. Simmons suggests that change of address information is one of the most promising means with which to study intraurban mobility.

In addition to patterns of migration, the volume of migration is equally important to the school planner. Lee offers six factors that affect the volume of migration:

1. The volume of migration within a given territory varies with the degree of diversity of areas included in that territory.

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83 J. Simmons, "Changing Residence in the City," *Geographical Review*, LVIII, No. 4 (1968), 650.

84 Ibid.
2. The volume of migration varies with the diversity of people.

3. The volume of migration is related to the difficulty of surmounting the intervening obstacles.

4. The volume of migration varies with fluctuations in the economy.

5. Unless severe checks are imposed, both volume and rate of migration tend to increase with time.

6. The volume and rate of migration vary with the state of progress in a county or area. 85

A study of residential mobility in Detroit revealed that people who were married (and therefore more likely to have school aged children), who were homeowners and belonged to higher income levels were more likely to move from the central city to the outer portions of the city or suburbs. On the other hand, those persons who moved toward the central city tended to represent single persons, renters and members of a lower-income level. Chachkin describes this process as suburbanization in which the total population of the metropolitan area remains relatively unchanged, but the resulting population distribution is radically reoriented. 87

85 Lee, op. cit., 52-54.
86 Green, op. cit., 236.
Migratory patterns not only determine how many students are enrolled in the various schools within a school district, but can also determine the racial context of a school or a school district when differential patterns of racial migration affect the racial stability of a neighborhood. Studies of census data clearly show that migratory patterns are quite different between blacks and whites and between the South and the North. According to research conducted by Taeuber and Taeuber, northern blacks tend to live in housing left vacant by whites, whereas in the South blacks tend to live in housing built specifically for blacks or previously occupied by blacks. The rate of racial transition within a metropolitan area is largely dependent upon the rate of increase in black and white populations, the greater the rate of black population growth, the faster racial change occurs. The most popular hypothesis of racial transition is labeled the "tipping" hypothesis. In a study of white flight, Mumford credits the origin of tipping to a 1955 study of the Chicago Housing Authority conducted by Martin Meyerson and Edward C. Banfield. In this study it was found that

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88 Taeuber and Taeuber, op. cit., 5.
89 Ibid., 4.
if more than one third of the residents of an otherwise white housing project were black, the remaining white residents would leave until the project became virtually all black. Morrill found that white residents of a neighborhood are willing to accept a black occupancy rate of 5 to 25 percent, with a mean of 10 percent, before initiating white flight, depending on such variables as the characteristics of the blacks, the proximity of a ghetto, and the open-mindedness of the resident white community. The "tipping theory" has been applied to school populations with the percentage ranging from 30 to 50 percent black student population as being the critical point at which white students begin leaving the school at an accelerated rate.

The rapidity and magnitude of black in-migration have increased the intensity and size of northern ghettos, accelerating "white flight" to the suburbs and consequently affected the economic, political and social life of the central cities. The growth of black ghettos takes the form of a "spatial diffusion" process in which black migrants on a block-by-block substitution or diffusion process, replace white occupants. Monahan, for example, illustrates how migration can

92 Ibid., 341.
93 Ibid., 348.
have drastic implications for educational planning by citing neighbor-
hoods in Chicago which are changing from white to nonwhite on an
average of 4.5 city blocks per week. 94 Because many school desegre-
gation plans have not taken into account the phenomenon of racial or
social "tipping" points due to migratory patterns, the schools have
become an important factor in accelerating the instability of
neighborhoods. 95

Migratory patterns are important not only in determining the
nature of an initial desegregation plan, but also in monitoring the
results of desegregation years later. Palmer lists four types of reseg-
regation that can occur due to various forms of migration:

(1) Intra School - may result from policies on the part of the
administration, or, more subtly, by actions of the staff and
student body which can result in migratory patterns within
the school resulting in segregated classrooms or activities.

(2) Inter School - occurs when a desegregated school returns to
a segregated school because of changing residential
migratory patterns.

94 William Monahan, ed., Research and Data Problems in Big-
City Schools, U.S., Educational Resources Information Center, ERIC

95 D. Levine, "Integration in Metropolitan Schools: Issues and
(3) Inter System - occurs when white families either move or attempt to establish a fictitious residence.

(4) Extra System - occurs when parents remove their children from the public school system. 96

The "extra system" form of migratory patterns is the subject of concern in recent research conducted by Coleman, who discovered that whites with public school children are leaving cities with high proportions of blacks and that in large cities white parents are fleeing from integration. 97 Although Coleman warns that his analyses are not complete, such drastic demographic changes have obvious importance for policy implications both on a national and local level.

Summary

Demography plays an integral part in establishing and maintaining desegregated schools. Migration rates and patterns, fertility rates, and population distributions of blacks within metropolitan areas have a major impact on the resulting racial makeup of the schools. Although general demographic patterns for metropolitan areas exist on a national scale, an intimate knowledge of the unique local demographic

conditions with respect to race is essential in planning for equal educational opportunity.

Socio-cultural Variables and Equal Educational Opportunity

Socio-cultural data, such as information related to social, ethnic and economic characteristics, are becoming increasingly important in planning for equal educational opportunities. One reason for the recent emphasis on socio-cultural information is the combined results of research indicating that many other socio-cultural factors in addition to race are important determinants of academic success. Another reason that socio-cultural data are being used more frequently can be attributed to the broadened concept of equal educational opportunity. Coleman shows how the concept of equal educational opportunity has been expanded to include the output measures of schools when he states

... the crucial point is that effects of inputs have come to constitute the basis for assessment of school quality (and thus equality of opportunity) in place of using certain inputs by definition as measures of quality ....

The greatest argument for the importance of socio-cultural factors in educational planning is the study commissioned by the 1964

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Civil Rights Act, Equality of Educational Opportunity, commonly known as the Coleman Report. As one of the largest educational research undertakings ever performed, the Coleman report has had significant impact on national educational policy. The Coleman Report used multiple regression analysis in an attempt to determine which specific input factors had a significant effect on the achievement output of schools. Although the research methodology of the Coleman Report has been open to criticism, the substantive findings of the Report have found wide acceptability, through various replicative and related research efforts both in the United States and abroad.  

Despite the increased emphasis on socio-cultural information and its impact on equal educational opportunity, few efforts by state governments or local school systems have been undertaken to use such data in educational planning. One of the few attempts to systematically include socio-cultural data in educational planning decisions is described by Leu, who uses combinations of census tracts to form

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The racial composition of school populations and their subsequent impact on academic achievement has been the most studied element of equal educational opportunity. Prior to 1954 virtually all of the public schools in the South were legally separated by race, and de facto segregated schools were prevalent in the North. As a consequence studies comparing the effects of racial composition on achievement at that time were limited for the most part to comparing black schools to white schools. As the number of desegregated schools increased along with public reaction to desegregated schools, studies relating racial composition to academic achievement became more prevalent. However, many of the results of these studies are inconclusive or must be treated with caution. Inadequate sampling, faulty methodology, lack of accessibility to some schools and myriad other factors placed constraints on the external validity of many of the studies.

McPartland found that after controlling for family background factors ninth grade Negro students attending majority white classes were on the average one year ahead in academic growth of ninth grade

Negro students who attended segregated classes. The following relationships of achievement, race and socioeconomic class were found:

1. Racial classroom desegregation increases achievement for black students.
2. Classroom desegregation has an apparent effect on black student verbal achievement regardless of the racial enrollment of the school.
3. Regardless of socioeconomic status as the number of white students increase in the school, black achievement levels increase.
4. If race and socioeconomic status are held constant, the percent white school enrollment has no effect on black student achievement and
5. Black students who are isolated in segregated classes within a desegregated school do not show achievement gains.

Because this study was cross-sectioned in design, however, generalizations are somewhat limited.

102 Ibid., 101-102.
In a seven year longitudinal study of the voluntary desegregation efforts of the Sacramento, California schools, the school district concluded that minority students tended to perform better academically in desegregated schools than their peers; middle-class students were not adversely affected by desegregation; grade point averages increased; and parents and teachers reacted favorably to the results of desegregation. The school board in Evanston, Illinois, likewise studied the effects of its voluntary desegregation efforts in a four-year longitudinal evaluation conducted by the Educational Testing Service. The results showed that black students' achievement gained while the achievement of white students remained constant. As in Sacramento, the parents and teachers reacted favorably to the results of desegregation. In another voluntary desegregation program, the schools of Riverside, California were evaluated by the University of California. The findings showed that the achievement levels of minority group children had improved, the education of white children had not suffered, the highest


gains in minority achievement occurred when minority children were desegregated into schools of high socioeconomic status, and junior high school students gained more in behavior, language and attitude scores than reading scores.  

The value of desegregated educational experience to members of minority groups is probably best exemplified in research performed by Crain, which showed that black adults who had received interracial educations as children had better jobs and higher incomes than comparable blacks who had received an education in segregated schools. Pettigrew cites research studies which indicate that the average achievement of black children is raised by interracial classrooms enough to close one-fourth to one-half of the gap in achievement scores with white students.

Pettigrew in another study points out further evidence which shows that Negro children in classrooms of more than fifty percent white score higher in both reading and mathematical achievement tests than other Negro children and that the effect is stronger with those children who start an interracial school experience in the early

107 Ibid., 24.
grades. It was also found that desegregated black students had higher standard deviations than segregated black students.

The results of the federally commissioned study, *Equality of Educational Opportunity*, emphasized that the composition of the student body has a strong relationship to the achievement of Negro and other minority students. Carlson points out that the Coleman Report found that integration alone reduces the existing achievement gap between black and white children by 30 percent.

In another longitudinal study of the effects of desegregation and race on academic achievement, it was found that black students performed better after integration than before, and white and Indian students showed no negative effects. The race of the teacher also had no significant effect on students' achievement scores. The Coleman Report revealed that on a nationwide basis black students are more likely to be taught by black teachers and similarly white students, by

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112 Ibid.
white teachers. Coleman's results similarly showed that the proportion of white teachers had little effect on the achievement scores of black students.

According to the commissioned study, Racial Isolation in the Public Schools, disadvantaged Negro students perform at higher levels if they have been in school with whites for some time, regardless of the social class of their classmates.

Weinberg has comprehensively reviewed unpublished doctoral dissertations related to desegregation and academic achievement, and concluded that the cumulative evidence strongly suggests that desegregation improves the academic achievement of Negro children without impairing the achievement of white students.

School desegregation, per se, does not necessarily guarantee higher achievement rates for blacks according to research conducted by Armor. He found no gains in achievement among black students in

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113 Coleman, op. cit., 126.
114 Ibid., 318.
several cities who were bused to a desegregated school. 117 Laurent supports the conclusions of Armor and found that neither pupil race nor racial composition of the school per se, considered alone or interactively, seemed to have a substantial effect on academic performance when other relevant variables were controlled. 118

Different results were found by the Commission on Civil Rights which studied the busing program of the Berkely, California school system in 1965-1966 and found that those black students who were bused to a desegregated environment gained in achievement at a more rapid rate than those black students who remained in a segregated school. 119

Pettigrew's reply to Armor's research cites studies that show both black and white achievement scores increase significantly in racially mixed schools, and also studies that show a slight decrease in achievement among blacks shortly after integration. 120 Using a step-wise regression analysis, Baltzell found race to be the single most powerful predictor of academic achievement with socioeconomic-related

119 U. S. Commission on Civil Rights, op. cit., 131.
variables being the second most powerful predictors.

Jencks and Brown reanalyzed some of the data collected in the 1966 Equality of Educational Opportunity Survey and came to the same conclusion that the racial composition of a school is more important than the socioeconomic composition in increasing academic achievement rates in elementary schools. The author also found that the test performance of black students in 51-75 percent white schools improved relative to national norms between first and sixth grade; declined slightly for black students if they were in 76-100 percent white schools; and seemed to remain constant if they were in 0-50 percent white schools.

In her study of the distribution of reading scores in New York City's elementary schools, Stein discovered that ethnic and racial composition of schools had a greater effect on raising achievement scores than did socioeconomic status. Schools having 20 to 30

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123 Ibid., 131.

percent minority population achieved the highest median reading scores while schools having a 90-100 percent minority population scored the lowest. Only those schools having a non-white population of over 40 percent on the average scored below national norms.

The racial composition of schools also has an effect on psychological variables. Busk showed that the most influential factor affecting the student's self-concept was not ethnic membership, but the racial composition of the school. In a recent sociometric study of the effects of busing, it was discovered that cross-racial friendship occurred more often when the bused students were from the same general neighborhood and the same general living conditions. Since this study involved such a small sample, however, the authors are cautious in making widespread generalizations. In a study by White and Knight, it was found that black high school students who attended

125 Ibid., 23.
126 Ibid.
segregated schools had higher aspirations (i.e. a desire to attend college) than their counterparts in desegregated schools. 130 The authors also discovered that the aspirations of black students were not related to socioeconomic status. In a more detailed study dealing with occupational expectations of students; however, Lewis found different results, namely that (1) in integrated schools, white students have higher occupational expectation levels than nonwhite students except when socioeconomic status is low, the school is small, or social integration is high, (2) urban students have higher expectations than rural students, (3) the level of occupational expectation is positively related to socioeconomic status for both black and white students, and (4) in segregated schools the expectation level of white and black students do not differ regardless of socioeconomic level. 131 Lewis also found that in schools that were socially integrated, both white and nonwhite students have much higher occupational expectations than students who went to schools which were not socially integrated. 132


132 Ibid.
seemingly different results of the two studies mentioned above may lie in the differences between aspirations and expectations. Lewis cites several studies which indicate that students distinguish aspirations from expectations, and that there is an important difference between the occupation a person wants and the occupation he expects realistically to get.

The socioeconomic levels within a school can also determine the aspiration levels of a student. According to Haller and Miller, an individual tends to adopt the attitudes of the group to which he belongs and that group standards and other factors of the social and physical environment can have an influence on the level of occupational aspiration or expectation. One of the most interesting findings of the Coleman Report related to both school and home environment, was an attitudinal characteristic which Coleman labeled "sense of control of the environment". It was found that this attitude had a stronger relationship to achievement than all of the school factors combined, was unrelated to most school factors, and that minority students had far less conviction than whites that they can affect their own environments

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and futures. It was further discovered that those black students who had high degrees of sense of control of the environment achieved higher than white students who had no such attitudes and that as the percentage of white students in the school rose, so did the sense of control of the black students.

The major conclusions of the Coleman Report showed that the socioeconomic level of the home had more effect on a student's achievement level than anything else and the second most important variable was the socioeconomic level of the school. In other words, achievement in school is determined more by factors outside the school rather than factors which the school traditionally controls. In addition the most significant school correlate of achievement test scores uncovered by the Coleman Report was the social-class climate of the school's student body. The Report found that a student's achievement level is strongly related to the educational backgrounds and aspirations of the other students of the school, the effect being stronger for minority

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134 Coleman and others, op. cit., 23.
135 Ibid.
136 Jencks and others, op. cit., 100.
137 Coleman and others, op. cit., 312.
Coleman contends that the higher achievement of all racial groups in schools with greater proportions of white students results not from racial composition per se, but from the better educational background and higher aspirations which white students tend to display.

The influence of the values and aspirations of families having a middle class background is a common hypothesis used to explain the increased achievement rates disadvantaged students typically display when schools have been desegregated. Statistics reveal the close relationship between economic status and race showing that only 25 percent of blacks are considered middle class compared to 60 percent of all whites.

In an earlier study relating education and income, Sexton concluded that the home environment and the social class conditioning in the child's neighborhood largely determines what happens to the student in school. Results from the Coleman study, indicates that 14 and

139 Coleman and others, op. cit., 22.

140 Ibid., 307.


142 Patricia Sexton, Education and Income (New York: The Viking Press, 1961), 139.
16 percent of the variance in verbal achievement for sixth grade black students and white students, respectively, were accounted for by family background factors. Jencks, in reanalyzing some of the data generated from the Coleman Report, found that family background alone, accounted for 35 percent of the variance in students' test scores. Jencks also discovered verbal ability to be highly correlated with socioeconomic class while tests of reading comprehension, mathematics skills and nonverbal abilities did not correlate as highly.

Several evaluations of desegregated educational settings have shown that the environmental background of the student plays a large part in the level of achievement attained. In 1970 the Center for Education Policy Research concluded that 80 percent of the achievement difference between black and white students was explained by differential growth over summer vacations. Project Concern, a voluntary program in Connecticut showed that students from black ghettos of four cities who were placed in the educational environments of 26 suburban school districts, gained 1.2 years worth of reading skills in a four-month period, while the control group who remained in the

143 Coleman and others, op. cit., 300.
144 Jencks and others, 315.
145 Ibid., 78.
146 Carlson, op. cit., 461.
ghettos fell further behind. 147

In another study with similar results, McPartland hypothesized that the reasons for increased achievement among Negro students in biracial classrooms may be due to increased motivation as a result of competition with whites, availability of high-achievement models, peer interaction, and better teaching. 148 Downs concurs in the above conclusions and recommends that the only solution for socially, culturally and economically deprived households is the removal from present environments. 149

What had previously been considered purely racial problems in education are now being partly attributed to, or in some cases overshadowed by socioeconomic factors. Foster proposes that socioeconomic considerations as well as race be considered in assignment patterns of schools. 150 The importance of socioeconomic level in school desegregation is underscored by research conducted by Kish. In this study of Detroit census tracts, it was found that variability in racial composition among census tracts was much greater than

147 Ibid., 465.
variability in other socioeconomic characteristics of tracts. 151

Rigidity of housing patterns within racial enclaves based upon socioeconomic status is also quite common according to Taeuber. 152 In his study of the Negro Ghetto, Morrill cites studies which show that whites will accept Negroes of equivalent income, education and occupation. 153 Although it seems economic discrimination is more prevalent than racial discrimination, it is evident that the two factors interact. In a study of standard metropolitan statistical areas with populations greater than 100,000, Blalock found a moderately high correlation (+.42) between the percentage Negro residency and the Negro-white median income difference. 154 Glenn reports similar relationships of income that have correlated positively with percentage of nonwhites, in addition to white-nonwhite differences in


education and home ownership.  

Solmon points out the positive relationship between education and income and the fact that certain nonwhite minorities have on the average lower incomes than whites and attributes this difference in part to differences in educational attainment between blacks and whites.  

Siegel found that as the level of education increased for blacks the amount of occupational segregation increased, except for those blacks who had four or more years of college.  

Duncan, using a causal model derived from a path analysis of data collected in 1962 found that the mean occupational score for whites was almost twice as high as the score for non-whites.  

He also found that 28 percent of the white-nonwhite difference was accounted for by differences in family background, namely the tendency for nonwhites to have fathers with lower levels of educational and occupational status than whites.  

An additional 20 percent of the variance was attributable to the tendency


of nonwhites to have lower levels of education, another 2 percent to the fact that nonwhites tend to have more siblings and 50 percent remained unexplained.

In his studies of occupational inequality, Jencks made the following conclusions: 1) occupational status is strongly related to educational attainment, 2) schooling seems to be important in and of itself, not as a proxy for cognitive skills or family background and 3) while occupational status is more closely related to educational attainment than anything else, there are still large status differences among people with the same education. 159 Despite the close ties of education to occupational status, Jencks points out large discrepancies between black and white occupational attainment that are neither attributable to a lack of cognitive skills nor the fact that blacks had to overcome larger economic handicaps, but are probably the result of discriminatory practices. 160

In a study of income levels in New York state, Antonovsky and Lorwin came to the following conclusions: 1) blacks must have higher qualifications than whites to compete for jobs, 2) the lack of formal education is more of a handicap for blacks than for whites and although an adequate education is necessary, it takes more than education to

159 Jencks and others, op. cit., 191.

160 Ibid., 190.
overcome the economic handicap of minority group status, and 3) blacks have a considerably higher dropout rate at the high school level and one in five white high school students graduated from college, but only one in nine of black high school students receive a college degree. 161

Part of the problem of relieving the educational and income disparities between blacks and whites is the cyclical relationship between the two variables. In what is probably the most significant work done in researching the relationships between education and income, Sexton has shown that as income levels increase, achievement scores in school also tend to increase, in addition to reading abilities. 162 Sexton believes that if a child's class status, family income, and parent's educational level is known, the child's performance in school can easily be predicted. Yet, in order to acquire a higher socio-economic status low-income minority groups must achieve in school. Havighurst has demonstrated that the amount of schooling is closely correlated with income for blacks, Chicanos, Japanese-Americans,


162 Sexton, op. cit., 27-29.
Chinese Americans and for children of low-income whites.  

Educating low-income children is compounded by the problem of a high mobility rate. Sexton attributes a higher degree of mobility of lower status pupils to such factors as a high incidence of broken homes, nonattachment to housing because of a high percentage of renters, and a sort of regression toward the mean effect in which low-income people tend to move to wealthier sections of the city.  

Blackman provides a measure of the migratory rate among low-income students in a study conducted in Detroit. Among families with annual incomes below 5000 dollars, 49 percent either entered or left a school during one semester. For children belonging to families earning more than 9,000 dollars annually, the exit-entry rate was only 17 percent.  

With the symptom of low achievement compounded with high-migratory patterns, the problem of educating children of low-income families becomes obvious.

Milner in his research of employment, education and race found that the differences in occupational distribution were due largely

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164 Sexton, op. cit., 96.

to differences in years of schooling between blacks and whites. 166

Although the educational gap is closing, Milner sees educational differences as a bottleneck to occupational equality. Antonovsky and Lorwin have shown that the stability of the home had a slight effect on school records and realistic planning on the part of the student, and that among blacks, high school graduation of one parent increases school achievement.167

The U. S. Commission on Civil Rights report on racial isolation found that blacks with similar levels of education to whites did not earn similar amounts of money for similar jobs. The discrepancies have been attributed to employment discrimination and the quality of education.168 In his case study of Allentown, Pennsylvania, Lee found that unemployment was related to the large number of blacks found in unskilled labor and service occupations, which represented areas of low job demand and security.169 Additional family factors that have been shown to have a relation to low job status and high unemployment


167 Antonovsky and Lorwin, loc. cit.


include the nature and size of the family with low-income, rural and large families displaying high positive correlations. Kain has shown that residential segregation of blacks has also contributed to the high rate of unemployment among blacks.

The quality and location of housing of students are closely related to their racial and socioeconomic background, and are often related to the quality of educational opportunities. One of the major causes of de facto segregation is segregated housing patterns. 

Restrictive zoning ordinances and covenants, administrative determinations on building permits, inspection standards, sewer and water locations, the use of the power of eminent domain and land use requirements have all had an effect on racially isolating black residents.

Correspondingly just as residential patterns are a determining factor of the school’s population, the racial composition of the school can have an effect on the makeup of the residential pattern.


Even though massive demographic transformations have occurred among blacks, their economic welfare has increased, and their living quarters have become less crowded, residential segregation has not diminished. In hearings before the Select Committee on Equal Educational Opportunity, evidence was presented indicating that de facto or residential segregation was being used to achieve resegregation of the schools. Residence is such a large factor in school composition that the state of California advocates in its school regulations putting to use the knowledge of patterns of residential segregation in an attempt to provide equality in the schools. Taeuber in a study of 109 American cities concluded that racial residential segregation was more universal than either ethnic or class segregation.


Summary

Although causality for the dilemma of most black students' low achievement levels are not known with the scientific rigor that is allowed in other disciplines, many of the factors have been identified. Socioeconomic status is one of the major determiners of low achievement. The socioeconomic status of blacks has had an effect on their life style, occupational patterns, income levels and levels of education. Patterns of racial discrimination have also been a part of maintaining the low socioeconomic status of many blacks. The racial composition of a school has also been shown to have a significant effect on the achievement patterns of minority students. The Coleman Report and other studies have shown that family background characteristics and other socio-cultural variables have a strong relationship to academic success in school. Despite the significance of such socio-cultural variables to school achievement, educational planning has rarely used these variables in a systematic effort to maximize the achievement patterns of students.
Chapter III  
METHODOLOGY

Legal cases from the District, Appellate and Supreme Courts of the United States were researched to derive those legal precedents that have relevance to the elimination of dual public school systems. To provide a proper perspective of the history of legal interpretations and how they have changed, significant cases and their outcomes were presented in a chronological order with the major emphasis occurring during the years following the Brown decision of 1954. The major sources of information from which legal determinants were derived include The Federal Supplement, The Federal Reporter, 2d Series, The United States Law Week, The United States Reports, and The Supreme Court Reporter. The legal research focused on the changing definition of de jure segregation and the role which demographic and socio-cultural variables have had with respect to school desegregation litigation.

Selected demographic and socio-cultural variables that have been shown to have a relationship to equal educational opportunity were analyzed using an illustrative case study of the Columbus, Ohio public school system and of the residential area of Franklin County. These analyses were separated into a school profile and a community profile.
profile and focused on the distribution of selected variables in the school and community according to different levels of percent minority enrollment and residence, respectively.

The unit of analysis for the school profile consists of each of the 126 elementary schools of the Columbus public school system. The elementary schools were partitioned into the following five categories of percentage of minority enrollment: 1) 0 - 6.9, 2) 7.0 - 36.9, 3) 37.0 - 62.9, 4) 63.0 - 89.9 and 5) 90.0 - 100. The second category (7.0 to 36.9 percent minority enrollment) is operationally defined as a desegregated school. This range of percentages is based upon a spread of 15 percentage points above and below the figure of 22 percent minority school-age population in Columbus computed from U.S. Bureau of the Census information. All other categories can be described as various forms of de facto segregated schools according to the following operational definitions: 0 to 6.9 percent minority enrollment represents racially isolated white schools; 37.0 to 62.9 percent minority enrollment represents racially tipping schools; 63.0 to 89.9 percent minority enrollment represents predominantly black schools; and 90.0 to 100 percent minority enrollment represents racially isolated black schools. Information regarding minority

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enrollment was obtained from Columbus public school records for the 1973-1974 school year. ²

The following dependent variables were analyzed for differences in mean scores and standard deviations among the five categories of schools:

1) percent of students at or above grade level in reading vocabulary
2) percent of students at or above grade level in reading comprehension
3) percent of students at or above grade level in arithmetic computations
4) percent of students at or above grade level in arithmetic concepts
5) percent of students at or above grade level in arithmetic applications
6) percent of students at or above grade level in spelling
7) percent attendance
8) percent incidence of Aid to Dependent Children
9) percent of substandard housing
10) percent of intact families
11) percent minority staff

Graphs showing the distribution of each of the dependent variables for each of the five categories of schools were also constructed.

Information related to the above dependent variables has also been derived from Columbus public school records for the 1973-74 school year. The first six dependent variables, which are achievement measures, represent the results of subscores of the Comprehensive Tests of Basic Skills administered to all sixth grade pupils of the Columbus City Schools. The percent of attendance reflects average daily attendance figures for each school. The percent incidence of Aid to Dependent Children is a general indicator of the poverty level of a school. Another indicator of poverty on a more drastic scale is the percent of substandard housing, defined as those homes not having piped hot and cold water, flush toilet and bathtub or shower inside the home for the exclusive use of the occupants. The percent of intact families constitutes the percent of elementary children having both a father and mother in the home, and the percent minority staff are figures derived from a Department of Health, Education, and Welfare Civil Rights Study.

The community profile used as its sample units the 210 census tracts of Franklin County. The average census tract has approximately 4,000 residents. The information available from each census tract represents the results of questionnaires administered by the Census Bureau on April 1, 1970 to samples of 20, 15 and 5 percent of

\[3\text{Ibid.}\]
the residents in each tract depending on the type of information being asked. The census tracts were partitioned into the following five categories of percentage minority residency: 1) 0 - 3.9, 2) 4.0 - 19.9, 3) 20.0 - 49.9, 4) 50.0 - 84.9, 5) 85.0 - 100. The second category (4.0 - 19.9 percent minority residency) is operationally defined as an integrated neighborhood. This range of percentages is based upon a spread of eight percentage points above and below the figure of 12 percent minority population in Franklin County computed from U.S. Bureau of the Census information. All other categories can be described as various forms of segregated neighborhoods according to the following operational definitions: 0 to 3.9 percent minority residency represents racially isolated white neighborhoods; 20.0 to 49.9 percent minority residency represents racially tipping neighborhoods; 50.0 to 84.9 percent minority residency represents predominantly black neighborhoods; and 85.0 to 100 percent minority residency represents racially isolated black neighborhoods. Information regarding minority residency was obtained from the U. S. Bureau of the Census' Census Tracts. The five levels of minority residency were geographically represented on a census tract map to provide a spatial perspective of the distribution of the five types of neighborhoods

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4 U. S. Bureau of the Census, loc. cit.
5 Ibid., P-2-P-24.
Differences among the residential groups were analyzed for the following selected dependent variables:

1) percent of population under 18 years of age
2) percent of population under 18 years of age who are under 5 years of age
3) fertility rate (per 1,000 women ever married)
4) percent population stability
5) percent migration from central city
6) percent migration from other part of SMSA
7) percent migration from North and West
8) percent migration from South
9) percent high school graduates
10) median school level completed
11) percent of secondary students enrolled in public schools
12) percent of elementary children enrolled in public schools
13) percent of kindergarten children enrolled in public schools
14) percent unemployed (male)
15) percent white collar
16) percent blue collar
17) percent laborer
18) median income
19) percent of families receiving public assistance
20) percent of homes built before 1940
21) median value of housing unit
22) percent housing units which are owner occupied

The first two dependent variables listed above are indicators of population distribution. The first variable, percent of the population under 18 years of age, was computed by dividing the number of persons in each tract under 18 years of age by the total number of persons in the tract. The second variable, percent of the population under 18 years of age who are under 5 years of age, was computed by adding the number of males under 5 years to the number of females under 5 years for each tract and dividing that number by the number of persons under 18 years of age for the tract.

The third variable, fertility rate, is an indicator of population growth. This information for each tract was obtained directly from census tract data.

Population migration factors are represented by the next five variables. Population stability is a measure of the percent of people

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6 Ibid.
7 Ibid.
8 Ibid., P-26 P-48.
in each tract who have remained in their own home for a five year period. This information was computed for each tract by dividing those persons who resided in the same house in 1965 as in 1970 by the number of persons in that tract who were five years of age and over. Variables five through eight were computed in a similar manner, namely the number of persons in each tract who in 1965 resided in a different house in each of the respective areas represented by variables five through eight, divided by the number of persons who were five years of age and over for each of the tracts.

The educational levels attained by residents within a tract are represented by variables nine and ten. The percent of persons who received a high school diploma and the median grade level completed by residents of each tract were obtained directly from census tract data.

Public school enrollment patterns for each census tract for secondary, elementary and kindergarten schools are represented by variables eleven, twelve and thirteen, respectively. Each of these variables were derived in a similar way - the number of students in

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9 Ibid.
10 Ibid.
11 Ibid.
each census tract who were enrolled in public school for each type of school divided by the number of those students who were enrolled in each respective type of school.\textsuperscript{12}

The next four variables represent employment patterns in each of the census tracts. Variable fourteen, percent of unemployed males in each tract is taken directly from the census tract.\textsuperscript{13} The remaining three variables represent the percent employed in each of three types of employment, each of a differing status level. These types of employment are generically referred to as white collar, blue collar and laborer. The percent of employed persons who are considered white collar was derived by adding the number of professionals, the number of technical and kindred workers and the number of non-farm managers and administrators and dividing this number by the total employed in the tract who are over 16 years of age.\textsuperscript{14} Blue collar and laborer employment categories were computed in similar ways. Blue collar employees consisted of persons employed in the following categories: sales workers; clerical and kindred workers; craftsmen, foreman and kindred workers; operatives, except transport; and

\textsuperscript{12} Ibid.

\textsuperscript{13} Ibid., P-50 - P-72

\textsuperscript{14} Ibid.
transport equipment operatives. \textsuperscript{15} Laborers consisted of persons employed in the following categories: non-farm laborers; farm workers; service workers; and private household workers. \textsuperscript{16}

Two indicators of the socioeconomic status of a census tract can be found in variables seventeen and eighteen. The median income of families residing in a tract is obtained directly from census data. \textsuperscript{17} The percent of families receiving public assistance was computed by dividing the number of families with public assistance or public welfare income by the number of families in each tract. \textsuperscript{18}

The quality and type of housing is represented by the last three dependent variables. The percent of homes built before 1940 was computed by dividing the number of structures built in 1939 or earlier by the total number of structures in each census tract. \textsuperscript{19} The median value of housing units within a tract was obtained directly from the census tract information. \textsuperscript{20} The last variable, which represents the

\textsuperscript{15} Ibid.
\textsuperscript{16} Ibid.
\textsuperscript{17} Ibid., P-74 - P-96
\textsuperscript{18} Ibid.
\textsuperscript{19} Ibid., H-26 - H-48
\textsuperscript{20} Ibid., H-2 - H-24
percent of housing units within a tract which are owner occupied, was derived by dividing the number of owner occupied housing units by the total number of all year-round housing units in each tract. 21

21 Ibid.
Chapter IV

THE LEGAL DETERMINANTS OF

EQUAL EDUCATIONAL OPPORTUNITIES

Legal knowledge, legal information and legal predictive skills are becoming increasingly important to educational planners. In fact the physical size, fiscal support, socio-composition, and educational programs of large school systems (and their subsystems are being shaped or modified by past, present, and future legal decisions. Therefore educational planning must utilize another source of data information — legal data.¹

Since the very beginning of the concept of public education in the United States, both state and federal courts have been involved in legal debates and decisions regarding the rights of children, parents and school boards. Providing equal educational opportunities to all children probably has been one of the most debated educational issues in the courts and is far from being settled. However, the various state supreme courts, the federal District courts, the federal Appellate courts and the Supreme Court of the United States have collectively, through a deliberate and slow case by case process, shaped the legal guidelines with which educational administrators and planners must

conform. To analyze each court decision involving equal educational opportunities is beyond the scope of this research, therefore only those cases which have a significant relationship to educational planning will be presented in chronological order.

Pre - 1954

In the aftermath of the Civil War, a series of amendments to the Constitution was ratified by the states to ensure the protection of the newly-freed slaves. One of these amendments, the Fourteenth, which was ratified in 1868, contained a clause commonly referred to as the equal protection clause and was included in the amendment for the purpose of insuring that the southern states would not be able to legally restrict the rights of Negroes. This clause which reads,

No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws",

has become the standard by which most of the school desegregation legal suits have been judged.

Few school-related cases reached the Supreme Court between the period of 1850-1950, with state courts citing the Tenth Amendment as authority that education was exclusively a state and local matter.  

Coupled with the "hands off" policy on educational matters endorsed by the Supreme Court, the decision of Plessy v. Ferguson made in 1896, had rippling effects that implicitly sanctioned separate schools for blacks and whites. The outcome of Plessy stated that separate but equal public transportation facilities were in congruence with constitutional rights. This decision was expanded to include separate school facilities for the two races. Southern states during this period, passed laws creating separate school systems for blacks and whites. The education of both races in the same institution was discouraged to the point that a private college was fined for not maintaining separate facilities for blacks and whites. In Gong Lum v. Rice, the Supreme Court established that Chinese students could be classified as part of the "Colored" race for educational purposes, thus in effect separating Asian students from the white majority.

Although it seemed that the "separate but equal" philosophy was ingrained in judicial interpretations, a series of cases in which the concept of equal educational opportunities was being debated began to erode the long standing Plessy v. Ferguson ruling. In 1938, it was decided that the absence of a law school for blacks in a state did not justify

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3 Plessy v. Ferguson, 163 U.S. 537 (1896).


5 Gong Lum v. Rice, 275 U.S. 78 (1927).
compensating black students with out-of-state scholarships to attend law schools in another state, when an all-white law school existed in the state. The court stated that

The question here is not the duty of the State to supply legal training, or of the quality of the training which it does supply, but of its duty when it provides such training to furnish it to the residents of the State upon the basis of an equality of right....

Ten years later the Supreme Court heard a similar case in which a qualified black was denied admission to the only publicly supported law school in the state of Oklahoma, solely because of her color. The Supreme Court reversed the decisions of the state courts and ordered the state to provide legal education for the plaintiff in conformity with the equal protection clause of the Fourteenth Amendment.

Just as the notion of separateness was no longer in judicial vogue, the concept of equal facilities was coming under critical review. In Sweatt v. Painter, the constitutional question was whether a state operating an all white law school and an all black law school was in violation of the equal protection clause. The black school was found to be inferior not only with respect to objective measures such as

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7 Ibid.
buildings, size and library holdings, but also on what the court held to be more important intangible factors "incapable of objective measurement" such as the differential reputation of the faculties, experience of the faculty and prestige of the two schools. The court ruled that the black school was not equal to the white school and that the state must allow admission of the black student to the previously all white law school. In a related case decided in the same year, McLaurin v. Oklahoma State Regents, the segregated seating of a Negro graduate student in the classroom, dining hall, and library at a state university was held to be unconstitutional because the restrictions limited the freedom of intellectual exchange with other students, which was held to be "an essential ingredient in the learning process." It was becoming apparent that increased judicial involvement at the federal level in local educational matters was inevitable.

In what has been termed the most significant ruling involving civil rights and education, Brown v. Board of Education has set the standards upon which virtually every school segregation suit has since been compared. The situation in Brown centered on a black student


who was refused admittance to a white school that was closer to the student's home, because of her race. Four related cases from other areas of the country dealing with the same issue were heard simultaneously. The conclusions of the Supreme Court were unanimous - that "separate educational facilities are inherently unequal. Chief Justice Warren delivered the opinion part of which included an argument showing the importance of education to the individual and society:

Today, education is perhaps the most important function of state and local governments ... In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms.

We come then to the question presented: Does segregation of children in public schools solely on the basis of race, even though the physical facilities and other 'tangible' factors may be equal, deprive the children of the minority group of equal educational opportunities? We believe it does.\(^\text{12}\)

With these words, the long standing "separate but equal" doctrine of Plessy was overturned and the edict that de jure segregated schools would no longer be tolerated by the courts became clear. Again the equal protection clause of the Fourteenth Amendment was used as the constitutional standard and was found to have been violated. The Chief Justice went on further to state,

To separate them [black students] from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status

\(^{12}\)Ibid.
in the community that may affect their hearts and minds in a way unlikely ever to be undone.\textsuperscript{13}

The basis of this judgement was unique in that it marked the first time the Supreme Court had accepted the expert opinions of thirty-two psychologists and social scientists on the possible harmful affects that segregation could have on black students.\textsuperscript{14}

Immediately following the ruling of Brown, Chief Justice Warren delivered the opinion in Bolling v. Sharpe, a case dealing with school segregation in Washington D.C.\textsuperscript{15} This case differed from Brown and the four related cases decided in conjunction with Brown because the Fourteenth Amendment did not apply to the District of Columbia.\textsuperscript{16} Instead, the due process clause of the Fifth Amendment was found to have been violated and the court concluded that segregation in public education imposes on Negro children a burden that constitutes an arbitrary deprivation of their liberty.

\textsuperscript{13} Ibid.


\textsuperscript{16} U.S. Commission on Civil Rights, op. cit., 13.
Although Brown and Bolling had declared segregated education unconstitutional, the Supreme Court had postponed the specific remedies for resolving the situation and who was responsible for eliminating the dual school structure. Brown v. Board of Education, hereafter referred to as Brown II, helped in determining the court's relationship in assuring the dismantling of segregated schools when it stated,

School authorities have the primary responsibility for elucidating, assessing, and solving these problems; courts will have to consider whether the action of school authorities constitutes good faith implementation of the governing constitutional principles.  

Because of the varied local conditions that have to be taken into account the Supreme Court also ruled that the lower courts should have jurisdiction over the plans submitted by school officials to create a unitary system and that these plans be implemented "at the earliest practicable date" and "with all deliberate speed." Problems which school officials must consider were outlined by the court and included problems related to administration, arising from the physical condition of the school plant, the school transportation system, personnel, revision of school districts and attendance areas into compact units to achieve a system of determining admission to the public schools

18Ibid.
on a non-racial basis, and revision of local laws and regulations which may be necessary in solving the foregoing problems. 19

As Chachklin reports, the Brown II decision set a precedent for the jurisdiction and power of the federal courts to change school district boundaries and opened the door to the concept of metropolitan school districts which could counteract the "white flight" phenomenon. 20

1956

In the Sixth Circuit Court of Appeals in Clemons v. Board of Education of Hillsboro, Ohio, some of the principles in Brown I and Brown II were applied in granting an injunction to the school board from enforcing a policy of racial segregation in the public schools. 21 The court ruled that a zoning system with a gerrymandered district separating the colored population from the rest of the city was against Ohio law and the constitution of the United States, and that the excuse of crowding in school rooms cannot justify segregation. In addition the court interpreted "deliberate speed" to mean that the school board must develop "a system of attendance zones based upon geographic or other relevant non-racial considerations ..." on or before the beginning of

19 Ibid.


21 Clemons v. Board of Education of Hillsboro, Ohio, 228 F. 2d 853 (1956).
the next school year.

In a district court decision, the school system of Nashville, Tennessee was allowed ample time, citing the "additional time ... necessary to carry out the ruling in an effective manner" provided in Brown II, to conduct a school census. Later in the same year the Fifth Circuit further defined "deliberate speed" and concluded that

the defendants may not, upon consideration of the merely personal viewpoints of the trustees and of the citizens generally, that the community is not psychologically ready for the change, continue the practice of segregation ....

1957

In 1957, in the Southern District Court, injunctive relief was granted to school children of Mexican descent for discriminatory testing practices which resulted in their segregation during the first four years of school for the purposes of gaining remedial English lessons. Testing per se was not attacked, but the grouping of students on the basis of ancestry, the court ruled, was arbitrary and unreasonable. The school board was given until the next full school year to eliminate

In 1958, the Nashville school board had submitted its required desegregation plan to the United States District Court for review. The plan was based upon a newly legislated state law known as the School Preference Law in which the parents of school-age children were given the right to decide the type of school their children should attend - one in which the students were of their own race, or an integrated school. The school board, in its plan, also mentioned potential psychological harm such as "socioeconomic class consciousness", the possible harmful effect on academic standards, and the possibility of student disorder as factors which the board may consider in assigning pupils to a school in the absence of the parent's preference. The district court rejected the plan and declared that the right of Negroes to attend public schools cannot be made dependent upon the consent of members of the majority race. The court also emphasized the need for the total removal of segregated schools when it stated, "The discrimination is clearly not eliminated by maintaining and operating some schools in the system on

a racially segregated basis and others with the discrimination removed.\footnote{26}

That Southern schools were trying to delay the rulings of Brown I was obvious, but no case epitomized the lack of good faith in the Brown ruling than the confrontation of the state and federal governments exemplified in Cooper v. Aaron.\footnote{27} In this case, the school board of Little Rock had approved a desegregation plan shortly after the Brown rulings. The governor and legislature reacted negatively to this plan and ultimately stationed national guard troops to prevent the admission of black children to the previously all white Central High School. This action prompted the Attorney General of the United States to file a petition on behalf of the United States, as amicus curiae to remove the national guard from the high school campus. The district court granted the injunction and due to disorder the following day, the black students were removed from the school during the morning by state police. The President intervened and used federal troops to insure the admittance of the black students to the school. In the resulting decision of the Supreme Court it was decided that a two and one half year delay in implementing the district's desegregation plan was not acceptable and that the constitutional rights of children can neither be

\footnote{26}{Ibid.}

\footnote{27}{Cooper v. Aaron, 358 U.S. 1 (1958).}
nullified openly and directly by state legislators, executives or judicial officers, or indirectly through evasive schemes for segregation.\textsuperscript{28} This case helped stifle further resistance to school desegregation in the South more than any other ruling and gave further weight to the interpretations of the equal protection clause of the Fourteenth Amendment presented in \textit{Brown I}.

\textbf{1959}

In the following year, \textit{Kelley v. Board of Education of the City of Nashville} was upheld by the Sixth Circuit Court of Appeals, allowing for a gradual grade a year desegregation pace, but allowing the district court to intervene if an accelerated plan could be affected.\textsuperscript{29} The Court of Appeals also stressed that cases involving public school desegregation largely depend on facts and the primary responsibility lies with school authorities to assess and solve local problems.

\textbf{1960}

The district court in Tennessee accepted the plans of local authorities (in Knoxville) to take twelve years to desegregate the public school system, with the exception of the technical high school which

\textsuperscript{28} Ibid.

\textsuperscript{29} \textit{Kelley v. Board of Education of the City of Nashville}, 270 F. 2d 209 (1959).
was ordered to be desegregated at an earlier date. Significant to educational planning in this case were the types of evidence used in presenting the case. Zoning maps based on enrollment studies, shifting populations, and the size and capacity of buildings were accepted as a necessary part of the plan. The resulting maps indicated that the black population of Knoxville was scattered throughout the city in small clusters and that the zone boundaries were often dictated by artificial barriers such as major streets and capacities of school buildings. In addition the court accepted the results of standardized achievement tests for black and white students as evidence substantiating the need to desegregate slowly.

In Maxwell v. County Board of Education of Davidson County, Tennessee, the Supreme Court gave tacit approval to the allowance of an annual grade by grade approach to desegregation by denying certiorari.  

1961

Judge Kaufman who presided over Taylor v. Board of Education ordered the transportation of certain students to certain schools in


order to give black children the constitutional right to associate with white children as outlined in Brown. This broad interpretation of Brown was affirmed by the Court of Appeals and denied certiorari by the Supreme Court. Racial changes in the residential patterns of a school district, and the board's consequent gerrymandering to maintain the racial imbalance of the school were found to be unconstitutional and in violation of the Fourteenth Amendment.

1962

The federal district court in Mapp v. Board of Education of City of Chattanooga ruled that seven years delay in desegregating the public schools was not a prompt and reasonable start toward full compliance with the ruling of Brown, but granted additional time to the school board based upon the theory that problems related to anticipating enrollment, absenteeism and other factors affecting classroom size, total enrollment and average daily attendance could be more easily handled utilizing a gradual approach to desegregation. A different conclusion was drawn in the appellate court ruling of Goss v. Board of Education of the City of Knoxville, in which the court decided in light of the experience


of desegregating several grades at one year intervals, the grade-a-year approach should be discontinued and desegregation should be accelerated. 35 The court also ruled that zoning or districting based upon location and capacity of school buildings was acceptable as long as it did not perpetuate segregation.

1963

In 1963, the use of transfer clauses in desegregation plans came under judicial review by the Supreme Court. In a unanimous decision, the court reversed all lower court decisions and ruled that transfer plans which allowed a student, solely on the basis of his race and the racial composition of the school in which he was enrolled, to transfer from a school in which he was a minority to a former segregated school in which his race would be in majority were in violation of the constitution. 36 The court concluded that "... no official transfer plan or provision of which racial segregation is the inevitable consequence may stand under the Fourteenth Amendment." 37 In a later decision of a United States District Court, the use of neighborhood zoning was


37 Ibid.
given court approval. In the same decision it was concluded that school boards had no affirmative duty to bring about integration.

By using the phrase "under sanction of law" the 1954 Brown decision was construed to apply only to those states which had laws requiring segregated schools. Bell v. School City of Gary, Indiana clarified the de jure - de facto distinction of segregated public schools by stating that where shifts in population result in increased or decreased percentages of Negro or white pupils attendance areas do not have to be changed by school boards. De facto segregation resulting from population changes was given court approval in this case as long as there was no intent on the school board's part to segregate the races.

In a similar de jure segregation case a United States district court applied different standards than in the defacto case outlined in Bell, namely that if geographical zones are used for assignment purposes, the zones must be unitary and nonracial. "Deliberate speed" was also given a new standard in this case, when the District judge

ordered all public school grades desegregated within two years.

The Supreme Court gave weight to the Brown decision when it ordered the State of Virginia to provide black students an education in Prince Edward County emphasizing that "the time for mere 'deliberate speed' has run out." In this case litigation had been initiated thirteen years earlier. To avoid the ruling of Brown the county had closed its public schools and reinstituted an exclusively white private school system which received state funds through tuition grants and tax credits. The court ruled that the closing of the county schools while giving assistance to private white schools violated the Fourteenth Amendment.

In an attempt to file an injunction to halt the construction of three elementary schools which would primarily enroll black students only, a United States district court held that since no evidence of deliberate design to segregate existed, an injunction could not be granted. 1965

Monroe v. Board of Commissioners, City of Jackson, Tennessee concluded that school attendance zones that are constructed

41 Griffin v. County School Board of Prince Edward County, 377 U.S. 218 (1964).

honestly even though de facto segregation may result are not unconstitutional and the question of honesty can be determined by consideration of the utilization of buildings, proximity of pupils to schools and natural boundaries. Although earlier court decisions seemed to condone the neighborhood school principle, the federal District judge in Barksdale v. Springfield School Committee handed down a broader view of segregated schooling and its concomitant causes when he stated,

The question is whether there is a constitutional duty to provide equal educational opportunities for all children within the system.... It is neither just nor sensible to proscribe segregation having its basis in affirmative state action while at the same time failing to provide a remedy for segregation which grows out of discrimination in housing or other economic or social factors. Education is tax supported and compulsory, and public school educators therefore must deal with inadequacies within the educational system as they arise, and it matters not that the inadequacies are not of their making. This is not to imply that the neighborhood school, *per se*, is unconstitutional, but that it must be abandoned or modified when it results in segregation in fact.

The court went on further to define a segregated school for Springfield to be one that has a nonwhite attendance of appreciably more than fifty percent.

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43 Monroe v. Board of Commissioners, City of Jackson, Tennessee, 244 F. Supp. 353 (1965).

In a situation similar to that involving Bell (see page 100), Deal v. Cincinnati Board of Education, again rejected ideals proposed by Brown emphasizing the difference between de jure and de facto segregation. In Deal, it was ruled that the Board of Education had no constitutional duty to transport students or classes out of the neighborhood for the sole purpose of achieving racial balance which was caused not by the Board, but by the racial composition of the neighborhoods. Similarly, it was ruled that the Board had no duty to select new school sites solely for the purposes of achieving racial balance. The court also clarified the concept of equal educational opportunity when it stated, that "equal opportunity requires that each child start the race without arbitrary official handicaps; it does not require that each shall finish in the same time." The court ruled that statistical imbalance in the schools was not enough by itself to constitute unlawful segregation, but purposeful discrimination had to be proven.

Bolner and Shanley outline how southern school districts actively sought court orders to desegregate, taking advantage of the slow, judicial process, when the Civil Rights Act of 1964 excused those school districts under court order to desegregate from the

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46 Ibid.
guidelines for filing desegregation plans. United States v. Jefferson County Board of Education, a collection of cases before the Fifth Circuit Court of Appeals, was an effort to alleviate this situation.

In this case a number of standards were set forth:

1) the only school desegregation plan that meets constitutional standards is one that works,

2) H.E.W. standards for desegregation are basically the same as the court's,

3) not all children have to attend a racially balanced school,

4) school authorities are under an affirmative duty to take corrective action toward an integrated school system,

5) segregation resulting from racially motivated gerrymandering is considered de jure segregation,

6) when racial imbalance infects the public school system there is no way to alleviate it without consideration of race,

7) gross discrepancies between the ratio of Negro and white students in a school and H.E.W. guidelines serve as an indicator that a plan is not working.

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49 Ibid.
The court also acknowledged awareness of some basis problems with which school officials are confronted in the process of desegregation including white flight to the suburbs, white flight to private and parochial schools, white flight of public school teachers to private schools, preference of many Negro children to finish school where they started, the gap between black and white achievement levels and the relationships of socioeconomic status to this achievement.

1967

In a rehearing, the court in United States v. Jefferson County Board of Education adopted the majority opinion of the original hearing; however of significant importance was the dissenting opinion of Judge Gewin, which was to have an effect on future judicial thought on the pressing distinction between de jure and de facto segregation. Judge Gewin stated that

The Negro children in Cleveland, Chicago, Los Angeles, Boston, New York, or any other area of the nation which the opinion classifies under de facto segregation, would receive little comfort from the assertion that the racial make-up of their school system does not violate their constitutional rights because they were born into a de facto society, while the exact same racial make-up of the school system in the 17 Southern and border states violates the constitutional rights of their counterparts, or even their blood brothers.

because they were born into a de jure society .... Due process and equal protection will not tolerate a lower standard, and surely not a double standard. The problem is a national one. 51

During that same year in another case, school planners were presented with a judicial interpretation that had the potentiality of narrowing the de jure-de facto distinction, namely that although the drawing of school attendance lines is a discretionary function of the school board, when challenged, the school board must show that the construction of attendance lines do not purposely preserve segregation. 52

Judge J. Skelly Wright upon the finding of segregated schools in Washington D.C. greatly expanded the interpretation of Brown to include socioeconomic integration as a necessary part of a school desegregation plan. 53 The court declared that classrooms should be racially and socioeconomically balanced and ordered faculty desegregation, termination of optional attendance zones, elimination of ability grouping and transportation to alleviate overcrowding as measures to achieve this. In its deliberation, the court used for the first time the findings of a major educational research project, the Coleman Report,

51 Ibid.
to make the following conclusions:

1. Racially and socially homogeneous schools damage the minds and spirits of all children who attend them—the Negro, the white, the poor and the affluent—and block the attainment of the broader goals of democratic education, whether the segregation occurs by law or by fact.

2. The scholastic achievement of the disadvantaged child, Negro and white, is strongly related to the racial and socio-economic composition of the student body of his school. A racially and socially integrated school environment increases the scholastic achievement of the disadvantaged child of whatever race.\footnote{Ibid.}

1968

The most significant case of this year was \textit{Green v. County School Board of New Kent County, Virginia} in which the Supreme Court closed additional loopholes formerly used to delay desegregation.\footnote{Ibid.} Not only did the court make it more difficult for school systems to procrastinate when it stated that "the burden on a school board today is to come forward with a plan that promises realistically to work and promise realistically to work now," it also declared that "freedom of choice" plans were not acceptable methods to use in eliminating a dual school system if such a plan does not work or a more effective plan...
can be utilized. The court placed an additional emphasis on monitoring the effectiveness of desegregation plans by placing the obligation of assessing the effectiveness of plans on the federal district courts. In coming to its conclusion, the court used information regarding enrollment patterns and residential patterns within the county for each race, finding that although the community was not residentially segregated, in three years of operation under a "freedom of choice" plan no white children had enrolled in a former black school and 85 percent of the black students had remained in their former schools. Using these statistics the court declared that the system was not a unitary one, and suggested that geographical zoning in this case would be a more effective method to dismantle the dual school systems.

In a related case the Supreme Court ruled that student transfer plans or other provisions would not stand under the Fourteenth Amendment if the provision resulted in racial segregation. In this case extensive use was made of geographical attendance zones, residential patterns and enrollment statistics in helping the court make its conclusions one of which was the advocacy of using junior high school feeder patterns from various elementary schools to promote desegregation.

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56 Ibid.

57 Monroe v. Board of Commissioners of the City of Jackson, Tennessee, 88 S. Ct. 1700 (1968).
In a similar case relating residence and school attendance, the United States Court of Appeals concluded that geographical zoning may not serve as a guise for gerrymandering zones to foster racial segregation and even though assigning pupils to neighborhood schools may be a sound concept, it cannot be approved if residence in a neighborhood is denied to Negro pupils solely on the basis of race, regardless of whether residential segregation resulted from state or private actions. 58

District Court Judge Julius Hoffman, presiding over a school desegregation case in a suburban area of Chicago, expanded the de jure segregation concept when he stated that

the requirements of the Fourteenth Amendment to the United States Constitution and Title IV of the Civil Rights Act of 1964 apply equally to all public school systems without regard to whether State or local law authorizes racial discrimination. 59

Judge Hoffman in his deliberation further eroded the de facto segregation argument by declaring that school boards must show constitutionally permissible bases for attendance zones that result in racially identifiable schools. Evidence used in coming to the conclusion that the schools under review were racially segregated included policy

58 Brewer v. School Board of City of Norfolk, Virginia, 397 F. 2d 37 (1968).

decisions made by the school board with respect to attendance zones, transportation of pupils, school site selection and construction, and organization of the structure of the educational program.

In the appeal of United States v. School District 151 of Cook County, Illinois, the appellate court upheld Judge Hoffman's rulings including the advocacy of using transportation to desegregate the public schools and the consideration of racial factors to undo segregation. Significant also in this ruling was the reinterpretation of Deal v. Cincinnati Board of Education, namely that although a school board may not have a duty to achieve racial balance it may not deliberately select school sites to achieve racial segregation.

1969

Despite the absence of the principal defendant, the Washington D.C. school board, the Court of Appeals agreed to review the ruling of Hobson v. Hansen with the appellants in this case being the former superintendent, a member of the Board of Education and the parents of certain school children. In this case the court upheld the use of transportation for relieving overcrowded situations.


In a school desegregation case being appealed for further relief the court commended the city of Knoxville for its progress in desegregating its schools and for taking into account geographical barriers and other factors involving population concentration and movements in its decisions for building site locations. 62

The major direction provided in Henry v. Clarksdale Municipal Separate School District was a list of court-approved techniques which could be used in establishing a unitary school including the redrawing of attendance lines, inclusion of a majority-to-minority transfer, the closing of all-Negro schools, consolidating and pairing schools and rotating principals. 63 The court also outlined criteria to be used in constructing a desegregation plan including the maximum utilization of school buildings, density of population, proximity of students to schools, natural boundaries and consideration of health hazards. In its deliberation the court further ruled that if after the implementation of a plan there still existed all-Negro schools or only a small enrollment of Negroes in white schools, the plan would fail to meet constitutional standards as outlined in Green.


In another case decided by the Court of Appeals, the distinction between de jure and de facto segregation was further reduced and the concept of metropolitan school systems further expanded. The creation of two distinct districts, one white and one black, despite no intentional gerrymandering, and despite the separatist views of both blacks and whites violated the requirements of equal protection according to the court. The court ruled that the political subdivisions are only lines of convenience for exercising governmental responsibilities and could not be used to deny federal rights. Judge McMillan reiterated the fact that segregation of children in public schools is unlawful and public opinion has no relevance in light of constitutional violations.

In the appeal of Deal v. Cincinnati Board of Education, segregation in the public schools resulting from racial concentrations in school neighborhoods as long as the segregation did not emanate from discriminatory acts of the school board did not have to be undone. Citing an Ohio statute requiring the selection of school locations in

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64 Haney v. County Board of Education of Sevier County, Arkansas, 410 F. 2d 920 (1969).

65 Ibid.


areas of the heaviest concentration of children, the court supported the neighborhood school principle.

The Supreme Court gave approval to the technique of altering school attendance boundaries to further desegregation in Dowell v. Board of Education of Oklahoma City Public Schools.68

The Supreme Court ruling in Alexander v. Holmes County Board of Education marked a turning point in school desegregation.69

In this case in which Mississippi school districts asked for more time in which to implement desegregation plans, the court ruled that the Court of Appeals should have denied all motions for additional time because continued operation of segregated schools under a standard of allowing 'all deliberate speed' for desegregation is no longer constitutionally permissible.70

In that same year, the Supreme Court reversed a decision by the Court of Appeals and upheld the district judge's opinion that fixed mathematical ratios were justifiable starting points in desegregation of faculty.71 The Supreme Court applied the standard of Alexander


later that year by reversing the appellate court's decision to allow postponement of student desegregation to September, 1970 and set the date earlier to February 1, 1970. 72

At the district level Judge Doyle in Denver had declared that the northeastern section of Denver had been de jure segregated and among the eleven reasons for his conclusion were board policies related to school construction, the use of mobile units to promote segregation, the recision of a prior board decision to integrate the schools primarily by busing and the use of probationary teachers in minority schools. 73 In an effort to remand the decision of Judge Doyle the board used the argument that more time was needed to foster public support. The court of appeals granted a petition for a stay of the ruling; however Justice Brennan reinstated Judge Doyle's ruling citing, Griffin and Green as rationale for refusing to delay a plan to eliminate de jure segregation. 74

In another case decided by a federal district court in Virginia, educational research in the form of the Coleman Report was used in the court's conclusion that, "... We cannot believe that the Supreme

Court, in requiring 'desegregation' has merely ordered a mixing of racial bodies without consideration of the social class factor." 75

1970

Another reversal of an appellate court decision that had not taken the opinion of Alexander into account occurred in Northcross v. Board of Education of Memphis. 76 In a case similar to Carter (see page 114), the appellate court applied the rulings of Alexander to speed up the conversion to a unitary system by allowing school officials only days to come up with a plan. 77

A United States district court in California made a more liberal interpretation of Brown than any previous court and equated de facto and de jure segregation. 78 In its conclusions, the court ruled that the use of a neighborhood policy and a policy against cross-town busing in a school system which had been found to have been racially segregated was a violation of the Fourteenth Amendment. Even though Pasadena residentially segregated by racially restricted covenants, resulting


in segregated schools, it was the burden of the school board to show that there were no educationally sound alternatives in eliminating segregated schools. To clarify some of the confusion in Alexander, the Supreme Court in a memorandum decision clearly indicated that the burden had been shifted from plaintiffs to defendant school boards to show the court why desegregation had not taken place plus the maximum time from the finding of noncompliance to the actual operation of a unitary school system, including time for judicial review should not exceed eight weeks. 79 In Northcross v. Board of Education of Memphis, Tennessee, City Schools, the Supreme Court after reviewing revised attendance boundary lines and enrollment figures by race, evidence which lower courts had not used, reversed the appellate court decision and ruled that in the absence of this information the lower court had acted prematurely and incorrectly in declaring that the public schools of Memphis were unitary. 80

In a lower court ruling, the court approved a plan consisting of a unitary geographical zone which was not gerrymandered and which strictly limited transfers even though there were several schools of


one race within the system. Transfers in which a student would be placed in a school in which he would be in the racial majority were not allowed in the plan. In addition the court approved the use of ratio parameters of 10% tolerance levels of the white-black system-wide percentage of teachers for each school's faculty.

The Pontiac school board was found guilty of de jure segregation due to its failure to draw attendance lines to promote integration, and similarly in its decisions for new school locations and was subsequently ordered to revise the boundaries and transport pupils to achieve desegregation. De jure segregation was expanded in the opinion of the district court when it declared that through acts of commission or omission when a school board takes part in the growth of segregation, it is guilty of de jure segregation. The court ruled that,

The right of all school children to obtain equal educational opportunity is of 'paramount importance' and cannot be subordinated even to criteria of nearness, safety of access routes, or capacities of the schools.

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83 Ibid.
In another district court decision in Tennessee, the court ruled that topographical features could not be used to prevent the establishment of a unitary system and that the board should restructure attendance lines when a study of community residential patterns demonstrates that restructuring would facilitate the creation of a unitary system. 84

A case which reached the court of appeals found that if a neighborhood school policy is to be used it must be shown that it has evolved from racially neutral demographic and geographical considerations. 85 The court also emphasized that the construction of new schools should promote a unitary system. In another Oklahoma case before the appellate court, a cluster plan for desegregation was approved, and since this technique was an innovation, the court emphasized that the ultimate test would reside in its actual effectiveness. 86

A statute which suspended a plan developed by the Detroit school board to increase racial balance in the school systems was held to be in violation of the Fourteenth Amendment by District Judge Roth, who also denied an injunction and motion to dismiss the Governor


and Attorney General of Michigan as defendants in the case. 87

The courts again raised the public consciousness of socioeconomic segregation when it concluded that "isolation of children from low socioeconomic families creates an atmosphere which inevitably results in an inferior educational opportunity." 88 In Brewer v. Norfolk, the court used predominantly middle class white students in each school to raise the achievement levels of black students without jeopardizing the white students' scores in addition to stabilizing the system by preventing white flight. 89

1971

Nineteen seventy one saw an accelerated case load of school desegregation suits at all levels of the federal judiciary. In a district case direction was provided as to the definition of a racially balanced school, when Judge Robert Mehrigie accepted a desegregation plan in which a school would have a minority-majority ratio in which each group would be at least 50 percent of the projected city-wide ratio for

that group. 90 The court also used as a rule of thumb a 90 percent figure in defining a racially identifiable school. Projected enrollment figures for four different plans using the above racial parameters as criteria for judging the effectiveness of a plan were used to determine the best plan.

In a district level case in New Jersey, the concept of racial imbalance in the public schools as a result of imbalanced housing patterns came under judicial scrutiny. The court ruled that this form of de facto segregation was not susceptible to federal judicial intervention. 91 However, the legal duty of school boards to provide racially balanced schools was perceived differently in a California district court, which ruled that the maintenance of unequal educational opportunities because of racial imbalance was a denial of the equal protection of the laws guaranteed by the Fourteenth Amendment and school officials had an affirmative duty to provide racially balanced schools. 92 Meanwhile, another case filed in a California district court, emphasized the fact that constitutional rights are not violated unless a board of education purposely perpetuates and maintains

racially segregated schools. 93

Another California federal district court defined de jure segregation as "any rule or regulation by school authorities which creates or continues or heightens racial segregation of school children." 94 De facto segregation was further eroded when one of the most pressing demographic concerns related to school desegregation, white flight, was declared an unacceptable reason to "shrink from constitutional obligation to establish desegregated school systems." 95

In another district level case, the court allowed the Little Rock, Arkansas school system to delay the implementation of their desegregation plan due to the lack of availability of buses with which to transport children. 96

In establishing guidelines for achieving racial balance in the Memphis, Arkansas schools, the district court allowed deviations in each elementary school of approximately 20% from the average black-white school-wide student ratio of 52% white, 48% black to satisfy

legal standards of desegregated schools. 97

Environmental factors related to a neighborhood, such as high crime rates, use of narcotics and number of intruders, were found to be justifiable reasons to close a school within the context of a desegregation plan. 98 Another form of data which has been found to have relevance in designing school desegregation plans is the capacity of individual school buildings. A district court in Tennessee refused to give approval to a desegregation plan, ruling that without information concerning unused capacity in school buildings and how it will be used, the reliability of statistical data could not be evaluated. 99

The existence of schools of predominantly one race in a school places the burden on the school board to show that the assignment patterns to such a school are nondiscriminatory. 100 After reviewing the Ordinance of 1787 which served as the governing document of the Northwest Territory and subsequent laws related to public education, Judge Dillin ruled that the state was ultimately responsible for public


schools and not the local boards. This broadened view of responsibility in educational matters was later expanded beyond those states composing the Northwest Territory to include virtually all states within the nation.

In another district court ruling, school boards were warned that they would be held accountable for any resegregation due to school construction and abandonment and that the guarantee of equal educational opportunity was not limited to the central city of a metropolitan community, but was applicable to suburban areas also. When 1800 students left the public schools of the Pointe Coupee Parish schools to enroll in private schools, resulting in the resegregation of three all black schools, the district court in Louisiana declared such an action, de facto segregation, and as a consequence did not entitle the federal government to supplemental relief. A confrontation between following the law and following sound educational practices was the issue in Swann v. Charlotte-Mecklenburg Board of Education, in which Judge McMillan ruled that unlawful segregation is not justified by the


existence of educational reasons for acts which result in segregation. 104

In a Texas decision, the district court delivered a decision which seemed to be contradictory. On the one hand, the court stated that school districts were not obligated to achieve racial balances in schools when existing imbalances were attributable to "housing patterns and other forces over which school administration had no control." 105 But in the same ruling, the court went on further to state that "school authorities have primary responsibility for elucidating, assessing and solving problems that have arisen from past de jure segregation in schools." 106

With the role of the state's responsibility for education being expanded in addition to the fact that both northern and southern states were usually guilty of de jure segregation practices in the past, the school's position as a social equalizer gained renewed legal acceptance. The relation of demography and geography was emphasized in United States v. Plaquemines Parish School Board in which the district court declared that geographical isolation cannot justify perpetual racial


106 Ibid.
isolation when alternatives for desegregation exist. After finding the Detroit public schools guilty of de jure segregation, the definition of de jure segregation was outlined by a Michigan district court, specifically, (1) segregation must currently exist, (2) the state, through its officers and agencies must have taken some action with the purpose of segregating and (3) such action must have created or aggravated segregation in schools.

Nineteen seventy one also saw increased litigation involving school desegregation among the federal appellate courts. In Monroe v. County Board of Education of Madison County, Tennessee, the appellate court upheld a lower court ruling allowing intervention of the Department of Health, Education and Welfare to assist in the formulation of geographic zone assignments to eliminate segregated schools. The need for quick and accurate information available to the public related to school desegregation was also stressed. The creation of a new school district was approved by an appellate court as a valid method

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to achieve desegregation, however when such a new district results in maintaining or increasing the separation of the races, the state has violated its affirmative constitutional duty to end state supported school segregation. 111 Another appellate decision involving Pontiac, Michigan's schools claimed that school districts had no affirmative duty to achieve racial balances as a result of housing patterns and other forces over which the schools had no control. 112 However, in this case, it was found that by locating new schools in certain areas and establishing certain geographical attendance zones, the school board was guilty of de jure segregation. The failure to act, or sins of omission, the court ruled were as serious as failure to take affirmative action.

In the appeal of Goss v. Board of Education of City of Knoxville, Tennessee, the court reaffirmed that the neighborhood style of desegregation is not per se constitutional and that school authorities must justify the existence of all black or all white schools on bases other than accident or circumstance of neighborhood. 113

The appeal of Robinson v. Shelby County Board of Education authorized courts to accept alternative desegregation plans that promise to create a more unitary school system than plans proposed by school boards, when such plans do not follow the legal guidelines set forth by the courts. 114

Another appellate case determined that majority to minority transfers took priority over other transfers when space was scarce in schools being desegregated and that overwhelming racial majorities in most schools was evidence that segregation still existed. 115

In response to a major influx of blacks to a neighborhood, the use of mobile classroom units was used by the Denver school system to perpetuate the isolation of the races in addition to discriminatory transfer plans and gerrymander attendance lines. 116 The court concurred that segregated schools in Denver produced lower achievement and an inferior educational opportunity but claimed that an integrated school setting alone would not alleviate the needs of low socioeconomic and minority racial and ethnic background students.


The use of student ratios reflecting community patterns was
given approval as a starting point in establishing a unitary school
system in Swann v. Charlotte-Mecklenburg Board of Education; however, the Supreme Court ruled that every school in the community
did not have to reflect the racial composition of the system. The
court further stated that when one-race schools existed school author­
ities would have to show the court that such schools were not the result
of discriminatory practices. The court also authorized the use of non­
contiguous-pairing and any necessary transportation that may result
from such pairing. The court further held that the neutral assignment
of students to schools nearest their home would not be an acceptable
remedy merely because of its neutrality. A court-appointed expert to
devise a workable plan in the absence of a viable plan constructed by
the school board was also accepted. Of particular importance to
school planners was the following opinion delivered by Justice Berger
reflecting the unanimous decision of the court:

They [ local school authorities ] must decide questions
of location and capacity in light of population growth,
finances, land values, site availability, through an almost
endless list of factors to be considered. The result of this
will be a decision which, when combined with one technique
or another of student assignment, will determine the racial
composition of the student body in each school in the system.

117 Swann v. Charlotte - Mecklenburg Board of Education, 91
S. Ct. 1267 (1971).
Over the long run, the consequences of the choices will be far reaching. People gravitate toward school facilities, just as schools are located in response to the needs of people. The location of schools may thus influence the patterns of residential development of a metropolitan area and have important impact on composition of inner city neighborhoods. . . . it is the responsibility of local [school] authorities and district courts to see to it that future school construction and abandonment is not used and does not serve to perpetuate or re-establish the dual system. 118

On the same day in which Swann was decided, Chief Justice Burger delivered another opinion in which the court approved geographic attendance lines which were drawn to achieve greater racial balance in the public elementary schools of Clark County, Georgia. 119 Not only did this decision clarify that the 1964 Civil Rights Act did not restrict states from acting affirmatively to achieve desegregated schools, but it also authorized school boards to assign students differently because of race in order to "unfreeze the status quo that is the very target of all desegregation processes." 120

In another companion case decided with Swann and McDaniel the Supreme Court rejected a plan based upon neighborhood zoning when a plan involving non-contiguous pairing and transportation would have resulted in a greater degree of desegregation, emphasizing that

118 Ibid.


120 Ibid.
the measure of any school desegregation plan is its effectiveness.

The Supreme Court ruled that the lower courts and school board had erred in treating the eastern and western segments of the city as separate zones because of a highway which artificially bisected the city resulting in nine elementary schools remaining over 90 percent black.

In the October term another series of school desegregation cases reached the Supreme Court. In United States v. Edgar, Justice Black gave approval to a district court's order to withhold federal funds and accreditation to schools in Texas which had failed to meet their constitutional obligation to eliminate dual schools. This decision gave notice to other schools in similar situations that Title VI of the 1964 Civil Rights Act would be enforced.

Based upon the fact that California in its history, like nearly every state in the union, had practiced de jure segregation. Justice Douglas ruled that schools once segregated by state action must be desegregated by state action. In this case the fact that the school district of San Francisco had done nothing to eliminate or reduce racial imbalance in the public schools in the past was evidence that

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121 Davis v. Board of School Commissioners of Mobile County, 91 S. Ct. 1289 (1971).


the old policy of separate schools for separate races persisted.

The de facto - de jure distinction was reintroduced in Gomperts v. Chase by Justice Douglas. In this case Douglas pointed out that the equality portion of the separate but equal doctrine outlined in Plessy v. Ferguson was still valid, particularly for schools considered to be de facto segregated.¹²⁴ Douglas stated,

where public schools for Blacks or Chicanos are not equal to schools for Whites, I see no answer to the argument that school boards can rectify the situation among the races by designing a system whereby the educational inequalities are shared by the several races. That seems to me to be an acceptable alternative to removing the inequalities through an upgrading of the subnormal school.¹²⁵

In Justice Marshall's deliverance in Dandridge v. Jefferson Parish School Board, the fact that a desegregation plan may place difficult burdens on a school board and that some schools may not begin the school year smoothly were no excuses for delaying the rights of children to equal educational opportunities.¹²⁶

¹²⁵ Ibid.
A federal district court in Oklahoma declared that intercultural exchanges were not acceptable substitutes for a unitary school system, nor is public opposition or cost a reason for failing to desegregate. \footnote{127} The demographic profiles of metropolitan communities took on a new dimension in the ruling handed down by district Judge Merhige, in which it was decided that desegregation of public schools was not circumscribed by school district boundaries and could include adjacent districts and counties. \footnote{128} Whether or not residential segregation was publicly or privately caused had no bearing on the school's constitutional obligation to provide a unitary school system, and even physical boundaries cannot be acceptable school attendance boundaries if they serve to separate the races. Judge Merhige further concluded that when a school board builds upon existing housing segregation to perpetuate segregation in the public schools, the constitution has been violated. A similar decision was rendered by a federal district court in Kentucky which ruled that although a school board could not be held responsible for the existence of homogeneous black residential areas, the school board is compelled to eliminate as fully as possible school


segregation caused by neighborhood patterns even though it may be awkward, inconvenient, or bizarre to do so.\footnote{129}

A proposed plan where white students residing near the county line would be allowed to enroll in predominantly white county schools, thus avoiding enrollment in the mostly black city schools was held to be unconstitutional by a district court in Maryland.\footnote{130}

In one of the most significant court cases in the northern states, Judge Roth ordered the development of a metropolitan Detroit school desegregation plan after having found that the state and local education officials had contributed to the segregated schools of Detroit, by "building upon, taking advantage of and encouraging racially segregated demographic patterns deliberately fixed by governmental action at all levels ...."\footnote{131}

Elsewhere in Michigan, rulings that newly elected school boards could not delay or obstruct past rulings of former boards to desegregate, state government could not impede efforts of a school board to protect constitutional rights, and constitutionally secured rights could

\footnote{129 Jefferson v. Board of Education of Fayette County, Kentucky, 344 F. Supp. 688 (1972).}
\footnote{130 Starr v. Farks, 345 F. Supp. 795 (1972).}
\footnote{131 Bradley v. Milliken, 345 F. Supp. 914 (1972).}
not be subjected to popular referendum were delivered. 132 A similar situation occurred in Indiana when a school board was found guilty of de jure segregation for rescinding its plan to desegregate its elementary schools. 133

A district case in Maryland reiterated the legal attack on the neighborhood school concept by stating that the neighborhood school cannot compel a continued pattern of unconstitutional segregation, even at the elementary level. 134

In another case in Oklahoma the concept of desegregation was expanded beyond the racial mixing of students in school buildings in another appellate ruling which forbade school officials from perpetuating dual educational systems by maintaining segregated classes within a building or in separate buildings or using differential course offerings for certain groups of students for the purpose of desegregating them. 135 The court rejected the rationale of housing patterns


accounting for the existence of one-race schools in another appellate court. 136 Five elementary schools were exempted from a desegregation plan based on evidence that the predominantly black schools were a result of shifting population movements and not the result of any discriminatory state action. 137

The appeal of Bradley cited testimony from Dr. Pettigrew, an expert witness, who testified that to achieve integration a school should have a racial range of 20-40 percent black students. 138 Using these figures and the racial percentages of the adjoining counties which had been ordered to desegregate with the city of Richmond would have created an integrated system, but in the absence of state-imposed segregation, the appellate court overturned Judge Merhige's order to consolidate the three school districts. Nashville, Tennessee, which has a metropolitan system of public education and had been involved in litigation since 1955, was ordered to develop a plan to account for population shifts which affected the racial composition of some


schools.  

In another case the school authorities of Memphis were found, through a pattern of selective construction, school location decisions and systematic over and under utilization of school buildings, to have maintained a dual school system, thus necessitating the district court to order further desegregation plans.  

In a fifth circuit case, the distinction between de jure and de facto segregation was declared void when the court stated,  

we think it clear today beyond peradventure that the contour of unlawful segregation extends beyond statutorily mandated segregation to include the actions and policies of school authorities which deny to students equal protection of the laws by separating them ethnically and racially in public schools . . . Such actions are 'state actions' for the purposes of the Fourteenth Amendment, and result in dual school systems that cannot be somehow less odious because they do not flow from a statutory source.  

Thus the mere finding of racial imbalance was equated with de jure segregation regardless if the school was located in the north or south.  

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139 Kelley v. Metropolitan County Board of Education of Nashville, Tennessee, 463 F. 2d 732 (1972).  

140 Northcross v. Board of Education of Memphis City Schools, 466 F. 2d 890 (1972).  

141 Cisneros v. Corpus Christi Independent School District, 467 F. 2d 142 (1972).
The Supreme Court reversed the court of appeals in Wright v. Council of the City of Emporia ruling that the creation of a new school district which would retard the process of dismantling a dual school system should be enjoined from doing so.\(^{142}\) In a similar situation in North Carolina, the Supreme Court permanently enjoined the implementation of a state statute which would have allowed the creation of a new district within an existing district in the process of desegregating, the new district having the potential to impede the elimination of dual schools.\(^{143}\) The court also ruled that "white flight" into private schools was not an acceptable reason for achieving anything less than a unitary system.\(^{144}\)

Although the Supreme Court affirmed the district court ruling in Spencer v. Kugler which basically stated that racial imbalance caused by housing patterns was beyond federal judicial intervention, Justice Douglas in his dissent opened up many issues related to de facto segregation which undoubtedly will be heard eventually by the Supreme Court. In his dissent, Justice Douglas pointed out the pervasive forms which state-imposed segregation can take, such as racial zoning.

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\(^{144}\) Ibid.
ordinances, racially restrictive covenants, decisions on building inspection standards, zoning and land use requirements and the power of eminent domain, each of which can have a discriminatory effect on housing patterns. Douglas cited the continued applicability of equality standards in Plessy v. Ferguson in the case of de facto segregation, although in his estimation there was probably little distinction legally between de jure and de facto segregation.

In Drummond v. Acree the Supreme Court made clear that the Education Amendments of 1972 did not circumvent its judicial powers to dismantle dual school systems when it ruled that a stay was not required since the case involved accomplishing the desegregation of a school system according to standards outlined in Swann and was not for the purpose of achieving a racial balance with which the amendments were concerned. 146

1973

Husbands v. Commonwealth of Pennsylvania points out that school authorities are not constitutionally required to integrate segregated schools resulting from housing patterns, however the separate-but-equal doctrine still applied for schools in this situation. 147

146  Drummond v. Acree, 93 S. Ct. 18 (1972).

Another federal district case in Pennsylvania held that the racial composition of schools was an important factor to be considered to maximize social and educational benefits related to attending a racially integrated school. 148

The existence of economically restrictive covenants in deeds and plat dedications did not establish a policy of de jure segregation according to a Texas district court. 149

Actions by the state of Missouri were declared unconstitutional when it created on the basis of race a small black and inadequately funded school district and failed to take actions to alleviate the situation. 150

Wide latitude was offered school boards in attempting to stem "white flight" from a school system undergoing desegregation. 151 In fact the district court declared constitutional the school board's policy of refusing to hire or rehire a teacher whose children were enrolled in a segregated private school.

In *Morales v. Shannon*, the district level court emphasized the fact that discrimination must have been found, not merely segregated schools, before the powers of the court could intervene in school matters. ¹⁵² Racial residential patterns of census tracts were used in determining if the location of a new school building was unconstitutional in a Nebraska federal district court. ¹⁵³

Upon remand from the Supreme Court, Circuit Judge Doyle, declared that the proof of de jure segregation in one area of the school system creates the presumption that other segregated schools within the system are unlawfully segregated. ¹⁵⁴

Judge Dillin ordered the state of Indiana to devise a metropolitan desegregation plan to counter the effects of white flight to the suburbs. ¹⁵⁵ In this decision, the court clearly pointed out that public education was a state responsibility in Indiana and not a local function and because three schools having predominantly all white attendance patterns were located within less than a mile from the boundaries of Indianapolis thereby perpetuating segregation, the state was guilty of

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de jure segregation.

Evidence of psychological harm to black and white students, lowered achievement levels of black students, and social difficulties were used in support of Judge Fox's conclusion that segregated education denies equal educational opportunity. In the same case the recission of a desegregation plan by a school board, whether or not it was constitutionally mandated, was declared an act of de jure segregation. It was further concluded that circumstantial factors of space (e.g. matters of geography and demography which may limit the impact of a board's actions), time, and quantity may affect causation and intention of segregated schools and thus affect the finding of liability.

In another district court it was found that unlawful segregation resulting from state action could be shown by the existence of a rigid superimposition of a neighborhood school plan built upon an historic pattern of residential segregation. In its affirmation of a lower court ruling the Seventh Circuit Court of Appeals declared that racial imbalance could be considered

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as a factor from which segregative intent could be inferred.\footnote{United States v. Board of School Commissioners of City of Indianapolis, Indiana, 474 F. 2d 81.}

The Fourth Circuit declared that national boundaries, such as a river, could not be used to partition a school system into two sections, one predominantly black and the other white when under orders to create a unitary school system.\footnote{Medley v. School Board of City of Danville, Virginia, 482 F. 2d 1061 (1973).}

The appeal of \textit{Bradley v. Milliken} was basically upheld, authorizing the crossing of school district lines to achieve school desegregation based upon the fact that state action had caused the dual school structure.\footnote{Bradley v. Milliken, 484 F. 2d 215 (1973).}

In another appellate decision the state was prevented from providing supplies and testbooks to racially segregated private schools when the public school system had been ordered to desegregate.\footnote{Graham v. Evangeline Parish School Board, 484 F. 2d 649 (1973).} The Supreme Court concurred in this opinion in a similar case during the same year.\footnote{Norwood v. Harrison, 93 S. Ct. 2804 (1973).}
The most significant school desegregation case reaching the Supreme Court in 1973 was *Keyes* the first major northern school system to be tried by the Supreme Court. The court declared that upon finding a significant portion of the school system intentionally segregated, the burden is on the school authorities to prove that other segregated schools were not intentionally done so.\(^{163}\) The court also found the district court at fault for not combining Negroes and Hispanics in the same category for the purposes of defining a "segregated" core city school. The opinion of the court, however, skirted the issue of whether or not de facto segregation was illegal and emphasized the fact that de jure segregation implied purpose or intent to segregate. The opinion rendered by Justice Douglas called for an end to the de jure - de facto distinction and was joined by Justice Powell's comment that,

\[\ldots\text{if our national concern is for those who attend such schools [segregated ], rather than for perpetuating a legalism rooted in history rather than present reality, we must recognize that the evil of operating separate schools is no less in Denver than in Atlanta}.\]^ {164}\]

Powell further acknowledged that the prime causes of school desegregation are social and economic influences which have concentrated minority populations in the inner cities, but that public school officials


\(^{164}\) Ibid.
have continuing responsibility for the public school system within their district.

The fact that racially identifiable schools remained in the Wilmington, Delaware public schools after having been ordered to desegregate, prompted the district judge to hold the state responsible for a school's violations of court desegregation orders.\(^{165}\) It was further decided due to the heavily disparate black-white residency patterns in the city and surrounding suburbs that the defendants should construct a metropolitan desegregation plan.

In Boston, Judge Garrity found the city school system guilty of de jure segregation based upon evidence of size and location of new buildings, maintained patterns of overcrowding and underutilization, and use of portable classrooms all with the intent to segregate students.\(^{166}\)

The district judge in Keyes decided that both plans submitted by the defendants were unacceptable and ruled that the district court itself would formulate a plan.\(^{167}\) Factors which were found to be

inadmissible in the rejected plans included the excessive use of busing, the definition of a desegregated school being 25 to 75 percent Anglo was inadequate to achieve integration and the closing of structurally sound inter city schools which ultimately would have an effect on the achievement of an integrated neighborhood.

Judge Weinstein, a federal District court judge in New York, set a precedent when after finding unconstitutional segregation in the Brooklyn schools in part due to housing patterns, directed housing and other authorities to submit plans to assist in achieving desegregated schools. The court also ruled that the objective success of school in educating students as compared to other schools in the district, segregation within the school, and the skills of teachers assigned to schools can be used in determining if racial segregation exists in the schools. Countering research studies which have attacked integrated schools, Judge Weinstein further declared that even if research indicated that segregated education was beneficial, it would still be held unconstitutional to separate the races. The court also stated that socioeconomic diversity should be taken into account in a desegregation plan and ordered housing authorities to encourage white and middle class families with children to move into publicly constructed

buildings by modifying rent and construction patterns.

In the Fifth Circuit Court of Appeals, state governments were prohibited from establishing, facilitating, encouraging or continuing a private segregated school in conflict with a legal mandate to operate unitary public schools. In this decision the actual result of state involvement in private discrimination was the legal standard as opposed to the establishment of a motivating reason.

The parameters of liability were broadened in Ybarra v. City of San Jose which established the fact that even if school authorities under a neighborhood school policy could not be charged with discriminatory acts, but acts of other state agencies led to the development of racially and ethnically isolated neighborhoods leading to segregated schools, relief could be granted to plaintiffs.

The appointment of two court appointed commissioners to develop a desegregation plan for the city of Indianapolis and a court order to accept federal funds to facilitate desegregation were upheld by the Seventh Circuit Court of Appeals after ruling that the plan developed by the school board was unacceptable. Since de jure


segregation in the suburban schools had not been found, however, the appellate court reversed the conceptualization of a metropolitan plan. Because a plan submitted by the majority school board in Dayton, Ohio did not remove "all vestiges of state-imposed school segregation" the Sixth Circuit Court of Appeals overturned a decision by the district court which accepted the plan, and ordered the development of a new plan. 172

Tracking which resulted in the classroom segregation of black and white students was held to be generally impermissible by the Fifth Circuit. 173

In an appeal of a desegregation suit involving the Grand Rapids, Michigan school district, school officials were told not to ignore the possibility of white flight in their desegregation plan. 174 The Sixth Circuit in another case declared that the standard of de jure segregation is whether state or local agencies through actions or inactions contributed substantially to the creation or maintenance of school segregation. 175 The failure of state officials to counteract or take

available measures against the segregative actions of local school officials makes the state responsible for de jure segregation and therefore liable to court intervention. 176

In the appeal of Morgan v. Kerrigan Judge Coffin proclaimed that

...while Boston is unique in some of its traditions, demographic profile and style, its uniqueness cannot exempt it from complying with a national policy forged long ago and laboriously implemented throughout the land. 177

The failure of the school board to take into account the growth of the student population by a pattern of selective action and refusal to act against foreseeable racial impact in the schools was reviewed as adequate evidence to uphold the district court's granting of injunctive relief.

The Sixth Circuit Court of Appeals upon finding both the city school system of Louisville, Kentucky and the surrounding county school system guilty of maintaining dual school systems, ordered a desegregation plan to involve both the city and the county. 178 The disregard for state-created school district lines in this decision lent

176 Ibid.


impetus to the concept of metropolitan school districts.

Milliken v. Bradley reached the Supreme Court during this year and the metropolitan plan ordered by the District court and approved by the Appellate court was reversed and remanded in a 5-4 decision. Since the suburban school districts which would have been involved in a metropolitan plan had not been found to have operated a dual school system, or had committed acts to effect segregation in the city school system, the metropolitan plan was ruled to have been an improper standard. The court, however, upheld the fact that school district lines and present laws regarding local control were not sacrosanct and if such boundaries or laws conflicted with the Fourteenth Amendment, the federal courts had a duty to prescribe remedies.

1975

One of the first cases heard by a district court in 1975, United States v. State of Missouri, applied some of the legal guidelines provided in Milliken v. Bradley, only having the opposite effect, namely the consolidation of three school districts into one for the purposes of


180 Ibid.
creating a unitary school system. This case differed from the
Detroit situation in the fact that two districts had a segregative effect
on a third and the numerous rejections of proposals to correct the
situation constituted de jure segregation, thereby requiring remedial
action by the courts.

The principle of segregated action with interdistrict effects
outlined in Milliken v. Bradley was further expanded in Evans v.
Buchanan which ruled that cross district remedies for desegregation
were permissible if it was discovered that governmental authorities
were significantly responsible for increasing racial discrimination in
residential and school populations between a city and its suburbs.

In McNeal v. Tate County School District, a school district
which had been ruled de jure segregated was prohibited from using
ability grouping which would have created further segregation.

The Appellate court stated that steps had to be taken to elevate disadvantaged students to peer status in order to eliminate educational
disadvantages caused by prior segregation before the court would allow
ability grouping.

183 McNeal v. Tate County School District, 508 F. 2d 1017 (1975).
The Eighth Circuit Court of Appeals upheld the United States v. State of Missouri case in which the district judge ordered the consolidation of three formerly segregated school districts into one unitary district. 184

Although the Supreme Court has allowed the existence of all-white or all-black schools in desegregation plans as long as the school board can show that such schools had been established on non-discriminatory standards, Tasby v. Estes disallowed a school district objective of reducing the racial group composition of each school to below 90% in a district having a 69% white population. 185

The Supreme Court upheld the district court's ruling in Buchanan v. Evans. This was the first case to reach the Supreme Court in which the interdistrict standards decided in Milliken v. Bradley were applied to another metropolitan situation. The court upheld the finding that

(1) a percentage of both races prior to the Brown decision had traveled into the city of Wilmington to attend segregated schools;

(2) the growth of identifiably black schools reflected a demographic shift of whites to the suburbs which in part was encouraged and assisted by governmental policies, "the cumulative effect of which constituted segregative action with interdistrict effects;"

(3) the state's Educational Advancement Act promoting consolidation of districts was unconstitutional since it had excluded the school district of Wilmington, creating a suspect racial classification under the Equal Protection Clause and thereby constituting a substantial interdistrict violation under Milliken.¹⁸⁷

The state government through various practices, including low-cost housing policies, had been accused of enforcing and approving of public and private discrimination resulting in a district consisting of 83 percent black students and resulting in segregated schools. Unlike the situation in the Detroit case, part of the remedy which the Supreme Court upheld in the Wilmington litigation included the development of a metropolitan desegregation plan involving the predominantly white suburbs surrounding predominantly black Wilmington.

¹⁸⁷ Ibid.
Summary

Because of the widespread generalizability of Supreme Court decisions, the following summary will briefly review Supreme Court decisions affecting three different substantive issues - 1) the distinction between de jure and de facto segregation; 2) the issue of neighborhood schools and metropolitan strategies; and 3) the utilization of demographic and socio-cultural data in court decisions.

De jure - De facto

Brown v. Board of Education marked the beginning of the de jure - de facto distinction of school desegregation, in 1954. The wording of Brown prohibited segregation under "sanction of law", and during this period of time affected only the 17 southern and border states which had passed laws requiring separate educational facilities for the two races.

In Bolling v. Sharpe, de jure segregation was expanded to include Washington, D.C., based upon principles of the due process clause of the Fifth Amendment.

In 1964, Griffin v. County School Board of Prince Edward County considered the closing of public schools while at the same time supporting private schools an act of de jure segregation.

Although the Supreme Court did not deal conclusively with the de jure - de facto issue in Gomperts v. Chase (1971), the Court declared the equality ruling of Plessy still to be in effect for schools
considered to be de facto segregated.

*Spencer v. Kugler* (1972) affirmed a lower court ruling which stated that racial imbalances caused by housing patterns were not in the domain of federal intervention. Justice Douglas, in his opinion, however, pointed out several ways in which state governmental action could have an effect on housing patterns and thereby constitute de jure segregation. The lack of unanimity on this issue indicates that future legal decisions will continue to shape parameters of de jure segregation.

The 1973 *Keyes* decision involved the first major northern city involved in a school desegregation suit and was expected to settle the controversy surrounding the de jure - de facto issue. However, the Court did not arrive at a definitive statement, but concluded that de jure segregation implied purpose of intent to segregate.

**Metropolitanism**

The beginning of the concept of metropolitanism has been attributed to the second *Brown* decision of 1955, which gave federal district courts the jurisdiction over the plans submitted by school authorities to create a unitary school system.

In 1971 the Supreme Court rejected a desegregation plan based upon neighborhood zoning in *Davis v. Board of School Commissioners of Mobile County*, when other plans utilizing non-contiguous pairing and transportation would result in more effective desegregated schools.
Although the Supreme Court had authorized several metropolitan plans to desegregate public school systems in southern and border states which had been found guilty of de jure segregation (e.g. Richmond, Virginia; Louisville, Kentucky; and Charlotte, North Carolina), no northern or de facto segregated system in which a metropolitan plan was being considered had reached the Supreme Court until 1974. The legal case involving this first northern school system was Milliken v. Bradley and involved the Detroit public school system and the surrounding suburban school systems. Since suburban school systems had not been found to have operated de jure segregated schools, the Court ruled that an interdistrict remedy would not be appropriate. However, the Court did not categorically dismiss the fact that district lines could not be crossed.

In 1975, the Supreme Court authorized for the first time in the North, a metropolitan plan for school desegregation. The Court relied heavily on demographic patterns in reaching its decision. The Court stated that white flight had been encouraged by governmental policies, which ultimately had a determining effect on the racial composition of the schools in the metropolitan area.

Demographic and Socio-cultural Data

The Brown ruling of 1954 used socio-cultural data to support its decision. The testimony of noted psychologists and sociologists
of the potential harm to Negro students that could result from segregated education, marked the first time such data had been used in shaping the decision of a major educational issue.

Taylor v. Board of Education, decided in 1961, emphasized the importance of racial changes in residence and the geographical locations of residency by race in determining if gerrymandering has resulted in de jure segregation.

Green v. County School Board of New Kent County, Virginia, decided in 1968, emphasized the use of enrollment and residential patterns of the county to determine the degree of segregation. Monroe v. Board of Commissioners of the City of Jackson also used similar data in the same year.

The following year in United States v. Montgomery County Board of Education the Supreme Court emphasized the importance of achieving racial balances among faculties of schools within a system. The Court held that fixed mathematical ratios were justifiable starting points in the desegregating of faculty.

The collection of demographic and socio-cultural data by school authorities received added significance in Carter v. West Feliciana School Board (1970). This decision placed the burden of showing there were no educationally sound alternatives in eliminating segregated schools on the school board.
In the same year, *Northcross v. Board of Education of
Memphis* emphasized the importance of demographic information,
which the lower courts had failed to collect. The Supreme Court ruled
that in the absence of such information, the lower courts had erred in
their judgement.

In 1971, the Supreme Court (in *Swann v. Charlotte-Mecklenburg*)
gave approval to fixed mathematical ratios as a starting point to
eliminate student segregation, although the Court ruled that it was not
necessary for each school to reflect the racial composition of the
system. The existence of one-race schools, however, were not con­
doned by the court, and in such instances school authorities were
required to show the court that those schools were not the results of
discriminatory practices. Demographic characteristics of the metro­
politan area were viewed as a necessary part of planning for equal
educational opportunity.

In *United States v. Scotland Neck City Board of Education*
(1972) the Supreme Court ruled that white flight into private schools
could not excuse school officials from desegregation.

*Buchanan v. Evans*, decided in 1975, also used demographic
studies of white flight as evidence in supporting the finding of de jure
segregation in the metropolitan Wilmington, Delaware public schools.
Chapter V

ANALYSIS OF DEMOGRAPHIC AND
SOCIO-CULTURAL VARIABLES

School Related Data

Distributions of eleven different variables were plotted for the 125 public schools of Columbus having a 6th-grade class. The schools were divided into five groups based upon the percentage of black enrollment. The following operational definitions of the type of school were applied to each of the analyses: isolated white schools (0-6.9 percent black enrollment); desegregated (7.0-36.9 percent black enrollment); tipping (37.0-62.9 percent black enrollment); black (63.0-89.9 percent black enrollment); and isolated black schools (90.0-100 percent black enrollment). Data used for each analysis were collected during the 1973-74 school year.

The distribution of schools by type of school is negatively skewed with nearly half of all schools (60) falling into the category of isolated white schools. Twenty-three schools compose the desegregated category and tipping, black and isolated black schools each have 10, 14 and 18 schools, respectively.
The percentage of students who are from families receiving public assistance (Aid to Dependent Children) for each of the five types of schools described above are graphed in Figure 1. The mean scores of the distributions for each of the types of schools increase as the percentage of black enrollment increased, ranging from a mean score of 3.0 percent for isolated white schools to 16.1 percent for isolated black schools. The distributions of the percentage of incidence of ADC for the isolated white and desegregated schools are negatively skewed, further accentuating the differences of these two types of schools with the other types, which have less skewed distributions. The mean score for the tipping schools is also affected to a considerable degree by the outlying score of one school.

The distributions of the percentages of students who live in substandard housing (i.e. homes that do not have piped hot and cold water, flush toilet and bathtub or shower) follow the same pattern for each type of school (see Figure 2). Each of the groups have consistently low mean scores, ranging from 1.0 percent for isolated white schools to 1.9 for tipping schools. Each of the groups also have short ranges of scores, suggesting that little differences exist across groups of schools and also across schools within each group.

Figure 3 represents the distributions of the percentages of intact families (both mother and father at home) for each type of school. The ranges of percentages are relatively wide within each type of
Figure 1. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Students from Families Receiving Aid to Dependent Children and by Percentage of Minority Students Enrolled, 1974.
Percentage of Students

Type of School According to Percent Black Population

\(<\) = group mean; \(\cdot\) = one school; \(*\) = ten schools

Figure 2. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Students Living in Substandard Housing and by Percentage of Minority Students Enrolled, 1974.
Figure 3. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Students from Intact Families and by Percentage of Minority Students Enrolled, 1974.
school. A twenty percent range exists across means for all groups, with isolated white schools showing the highest mean percentage of intact families (88.3 percent) and isolated black schools having the lowest average percent of mother-father families (68.3 percent). Tipping schools show the second highest mean percentage (84.0), followed by mean percentages of 82.6 for desegregated schools and 76.5 for black schools.

Attendance rates show a consistent pattern across all groups of schools (see Figure 4), with a range of 89 to 96 percent average daily attendance rates for each type of school. Mean scores for the separate distributions of the percent average daily attendance also follow a similar pattern, with little variation occurring across groups of schools. The lowest mean attendance rates were 92.6 percent for both desegregated schools and black schools. Isolated white schools had the highest mean attendance rate, 94.1; however the differences are for all practical purposes, insignificant.

The distribution of schools by the percentage of minority staff members (Figure 5) shows marked differences across types of schools. Isolated white schools have the lowest mean percentage (9.8) of minority staff, followed by desegregated schools (14.3), tipping schools (19.3), black schools (28.5) and isolated black schools (32.3). As the percentage of black students enrolled in a school increases, the
Figure 4. Distribution of Columbus Public Schools with 6th-Grade Classes by Average Attendance Rates and by Percentage of Minority Students Enrolled, 1974.

Type of School According to Percent Black Population

< = group mean; . = one school; * = ten schools
Figure 5. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Minority Staff and by Percentage of Minority Students Enrolled, 1974.
percentage of minority staff concomitantly increases. The distributions for each of the groups of schools are similar.

Figure 6 represents the distribution of schools by the percentage of students who scored at or above grade level in reading vocabulary for each of the five types of schools. The percents for each school are composites of student results on the reading vocabulary subtest of the Comprehensive Tests of Basic Skills (CTBS), a nationally normed series of standardized achievement tests. Isolated white schools have the widest range of percents and also have the highest mean percent score (54.5) of all the groups of schools. The range of percentages for desegregated schools is also wide, but the mean percentage (34.4) is considerably lower than the mean for isolated white schools. Tipping schools have a still lower mean percentage score of 27.8, with one outlying score that contributes to raising the mean score. Black schools and isolated black schools have still lower mean percentages (17.5 and 17.4, respectively) and also have narrower ranges than the other three types of schools.

Standardized scores of reading comprehension as measured by the CTBS, follow patterns similar to those of reading vocabulary (see Figure 7). In this case, isolated white schools have a mean percentage of 52.1, followed by desegregated schools (36.1), tipping schools (28.9), black schools (15.2), and isolated black schools (15.1). Again,
Figure 6. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Students at or above Grade Level in Reading Vocabulary and by Percentage of Minority Students Enrolled, 1974.
Figure 7. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Students at or above Grade Level in Reading Comprehension and by Percentage of Minority Students Enrolled, 1974.
little difference occurred between black and isolated black schools, with each type of school having relatively narrow ranges. However, the differences between the means of other types of schools were considerable, as were the ranges of percentage scores.

The distribution of schools' arithmetic computation scores can be found in Figure 8. Again, the measures which have been plotted are the percentages of students scoring at or above grade level for the arithmetic computation subtest of the CTBS for each school. As expected, white isolated schools had the highest mean percentage (46.2). Tipping schools had the next highest mean percentage (34.4), followed closely by desegregated schools (34.0). Black schools and isolated black schools had mean scores of 17.4 and 16.1, respectively.

Figure 9 illustrates the distributions of schools and their percentages of students who achieved at or above grade level in arithmetic concepts based upon CTBS scores. The same order of mean percentage scores was found as for arithmetic computations described above. The mean scores for each type of school in descending order are as follows: isolated white schools (52.1), tipping schools (38.5), desegregated schools (37.6), black schools (17.3) and isolated black schools (16.0). The same general pattern for other subtest percentages exists, with a general inverse relationship between percentage of black enrollment and the percentage of students achieving at or above grade level.
Figure 8. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Students at or above Grade Level in Arithmetic Computations and by Percentage of Minority Students Enrolled, 1974.
Figure 9. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Students at or above Grade Level in Arithmetic Concepts and by Percentage of Minority Students Enrolled, 1974.
A third arithmetic subtest of the CTBS, arithmetic applications, is graphed in Figure 10. Again, as expected, isolated white schools displayed considerably higher mean percentage scores (43.0) of students achieving at or above grade level than the other types of schools. Desegregated schools had the next highest mean (27.7), followed by tipping schools (25.4), isolated black schools (8.8) and black schools (8.7).

The final subtest of the CTBS analyzed measured competency in spelling. The distributions of schools and their scores on spelling can be found on Figure 11. The same basic order of mean scores for each type of school was found, however the differences between mean scores for each type of school was much smaller than for other subtests. Isolated white schools averaged 43.4 percent at or above grade level in spelling. The remaining average percentages for each type of school in descending order are as follows: desegregated schools (32.0), tipping schools (28.8), isolated black schools (25.1) and black schools (19.9).

Of all the subtest scores of the CTBS, isolated white schools excelled best in reading vocabulary with a mean percentage score of 54.5 at or above grade level and scored lowest in arithmetic applications with a mean percentage of 43.0. Desegregated schools scored best in arithmetic concepts, 37.6 percent at or above grade level,
Figure 10. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Students at or above Grade Level in Arithmetic Applications and by Percentage of Minority Students Enrolled, 1974.
Type of School According to Percent Black Population

< = group mean

Figure 11. Distribution of Columbus Public Schools with 6th-Grade Classes by Percentage of Students at or above Grade Level in Spelling and by Percentage of Minority Students Enrollment, 1974.
and lowest in arithmetic applications (27.7 at or above grade level).

Tipping schools followed the same pattern with respective mean scores of 38.5 and 25.4 on the arithmetic concepts and arithmetic applications subtests. Black schools scored highest on the spelling subtest (19.9 mean percentage) and lowest on the arithmetic application subtest (8.7 mean percentage). The same pattern applied to isolated black schools with the highest mean score of 19.9 percent at or above grade level in spelling to the lowest score of 8.8 for arithmetic applications.

Comparing all mean scores of the distributions of all types of schools for the various subtest scores of the CTBS provides interesting results. The highest mean score of the six CTBS subtests for isolated black schools and the highest mean score for black schools, is still lower than any of the individual mean scores for each of the remaining three types of schools. Also, the lowest mean percentage score of the isolated white schools is still higher than the highest mean score of any of the remaining four types of schools.

To provide a clearer picture of the relationships of the eleven variables already discussed, in addition to the percentage of black enrollment, a missing data correlation matrix was computed using a SOUPAC computer program. The resulting correlation matrix is presented in Table 1. Of most interest are the correlations of different variables with the percentage of black enrollment. Of these
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TABLE 1 (continued)

1 = percent incidence of Aid to Dependent Children

2 = percent of students living in substandard housing

3 = percent of students from intact families

4 = percent of average daily attendance

5 = percent of staff who are black

6 = percent of students at or above grade level in reading vocabulary

7 = percent of students at or above grade level in reading comprehension

8 = percent of students at or above grade level in arithmetic computations

9 = percent of students at or above grade level in arithmetic concepts

10 = percent of students at or above grade level in arithmetic applications

11 = percent of students at or above grade level in spelling

12 = percent of students who are black
correlations, the highest (.83) is with the percentage of black staff. A relatively high negative relationship (-.67) exists between percentage of black enrollment and the percent of students coming from a home in which both the mother and father are present. In general, relatively high negative correlations ranging from -.67 to -.43 exist between the percentage of black enrollment and the percent of students achieving at or above grade level in each of six subtests of the CTBS. The percentage of incidence of Aid to Dependent Children (ADC), a general index of poverty, had a moderately positive relationship (.47) to the percentage of black enrollment.

Other variables also have strong relationships to the percentages of students achieving at or above grade level. The effect of incidence of ADC has a moderate relationship to achievement patterns (-.37 to -.55). The percent of students who live in substandard housing show slightly lower correlations to achievement scores (-.37 to -.49). Of the variables studied, the percent of students from intact families showed the strongest relationship to achievement scores (.56 to .73). The percent of average daily attendance also has a strong relationship to achievement with correlations ranging from .58 to .71. The percentage of black staff has a moderate negative relationship with achievement scores ranging from -.46 to -.65.
Community Related Data

Twenty-two separate demographic and socio-cultural variables related to equal educational opportunity were analyzed for differences among five different groups of neighborhoods based upon the percentage of black residency. The following operational definitions of the type of neighborhood were applied to each of the analyses: isolated white neighborhood (0-3.9 percent black residency), integrated neighborhood (4.0-19.9 percent black residency), tipping neighborhood (20.0-49.9 percent black residency), black neighborhood (50.00-84.9 percent black residency), and isolated black neighborhood (85.0-100 percent black residency). Units of analysis were the 210 census tracts of Franklin County as defined by the 1970 census of the population.

To provide the background for the detailed analyses, population changes of the last two decades for both Columbus and Franklin County, Ohio were graphed on Figure 12. The population of the county has steadily increased from 503,410 in 1950 to 833,249 in 1970, an increase of 66 percent. During this same time period the black population grew from 52,075 to 104,387 an increase of over 100 percent, while the white population increased 61 percent. The city of Columbus has grown at similar rates. In 1950, the city population totaled 375,901. Of that population, 47,131 persons were black, or 12.5 percent. In 1960, the total population of the city had risen to 471,316, while the
Figure 12. Population Changes (total, white, and black) in Franklin County and Columbus, Ohio, 1950-1970.
black population increased to 77,140. By 1960 the percent of the population which was black had risen to 16.4 percent. The 1970 population statistics indicated that the Columbus population had risen to 539,677. Of this total, 18.5 percent, or 99,627 were black. Comparing the Columbus population statistics to the Franklin County population, it becomes apparent that nearly all of the blacks who reside in Franklin County live in the city of Columbus.

A geographical representation of the five types of neighborhoods described earlier can be found in the census tract map in Figure 13. Isolated black residential areas (85-100 percent black) are clustered around the near east side of the city and include 12 census tracts. Only one isolated black residential area lies outside the city boundary.

The 12 census tracts comprising black residential areas (50-84.9 percent black) are located for the most part around the periphery of the isolated black census tracts. All of the tracts categorized as black appear within the city.

Tipping neighborhoods (20-49.9 percent black) occur in two patterns. Nearly half of the thirteen census tracts categorized as tipping residential areas appear in a contiguous cluster bordering black or integrated areas. The other tipping areas appear as isolated tracts in various areas of the city between black areas and integrated areas. None of the tracts considered to be tipping appear beyond the
Figure 13. Percentage Distribution of Black Population in Columbus, Ohio and Surrounding Communities, by Census Tract, 1970

- Isolated white (0\%-3.9)
- Integrated (4.0\%-19.9)
- Tipping (20.0\%-49.9)
- Black (50.0\%-84.9)
- Isolated black (85.0\%-100)
city boundaries.

The 25 integrated tracts (4-19.9 percent black) form a large contiguous cluster in the central section of the city and also appear in outlying areas of both the city and the county. The integrated areas lie between tipping tracts and isolated white tracts.

The 148 isolated white tracts (0-3.9 percent black) in general, completely encircle the other types of tracts and appear along the edges of the city of Columbus, in the suburban areas and in outlying rural sections. From a cross-sectional viewpoint the geographical locations of the various types of residencies form concentric circles of residential patterns typifying the white flight phenomenon, with percentages of black residency increasing as proximity to the central portion of the city increases.

One of the demographic variables analyzed was the percentage of the population in each census tract who are under 18 years of age. This figure represents the percentage of those persons who are of public school age or who will be within five years or less. Table 2 shows the means and standard deviations of the distributions of populations under 18 for each of the five types of neighborhoods. Black areas have the highest mean percentage of population under 18 (37.0 percent) followed closely by isolated black areas. The areas having the lowest mean percentage of population under 18 are those census
Means and Standard Deviations of the Percentage of Population under 18 Years of Age by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.0-3.9%)</th>
<th>Integrated (4.0-19.9%)</th>
<th>Tipping (20.0-49.9%)</th>
<th>Black (50.0-84.9%)</th>
<th>Isolated Black (85.0-100%)</th>
<th>Total</th>
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<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
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</table>

The mean comparison matrix (Table 3) shows the relationships of all of the types of neighborhoods to each other. The somewhat limited range of mean scores indicates that little practical differences exist among the mean scores of the distributions of each type of neighborhood.

The composition of age structure was further analyzed by comparing the distributions of percentages of populations under 18 years of age who were under five years of age. This measure was intended to determine if differences in types of neighborhood would have a differential impact on the future enrollment patterns in the public.
### TABLE 3

Mean-Comparison Matrix for the Percentage of Population under 18 Years of Age by Percentage Minority Residency of Franklin County Census Tracts, 1970

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1. Isolated white (0-3.9)
2. Integrated (4.0-19.9)
3. Tipping (20.0-49.9)
4. Black (50.0-84.9)
5. Isolated black (85.0-100)
schools. The means and standard deviations for each of the five types of residential areas are presented in Table 4. The highest mean percentage of population under 18 years of age who are under five years of age occurs in the black residential group (27.0). The lowest mean percentage was only 23.6 percent for the isolated black tracts. As Table 5 indicates, the differences in mean scores are relatively slight. The largest difference exists between black tracts and isolated black tracts.

Another demographic variable which could differentially effect school attendance rates is the fertility rate of women. This rate is based upon the number of children born per 1,000 women ever

**TABLE 4**

Means and Standard Deviations of the Percentage of Population under 18 Years of Age Who are under 5 Years of Age by Percentage Minority Residency of Franklin County Census Tracts, 1970

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<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0-3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
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TABLE 5

Mean-Comparison Matrix for the Percentage of Population under 18 Years of Age Who are under 5 Years of Age by Percentage Minority Residency of Franklin County Census Tracts, 1970

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1 Isolated white (0-3.9)
2 Integrated (4.0-19.9)
3 Tipping (20.0-49.9)
4 Black (50.0-84.9)
5 Isolated black (85.0-100)
married. Table 6 shows the mean fertility rates for each of the five types of neighborhoods and their accompanying standard deviations. Isolated black areas show the highest mean fertility rate (3444) with the rate decreasing as the percentage of blacks decrease. Isolated white neighborhoods had the lowest fertility rate (2854) and the smallest variance (standard deviation of 450). The largest mean comparison existed between isolated black neighborhoods and isolated white neighborhoods (590 children born per 1000 women ever married). The smallest difference existed between black and tipping areas (54). The pattern of differences in means shows that as the percentage minority residency increases the fertility rate tends to increase (see Table 7).

### TABLE 6

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<th>Percent Minority Residency</th>
<th>Isolated White (0.0-3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>2854</td>
<td>2927</td>
<td>3185</td>
<td>3239</td>
<td>3444</td>
<td>2938</td>
</tr>
<tr>
<td>S.D.</td>
<td>450</td>
<td>902</td>
<td>1185</td>
<td>808</td>
<td>925</td>
<td>664</td>
</tr>
<tr>
<td>n</td>
<td>144</td>
<td>24</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>204</td>
</tr>
</tbody>
</table>
TABLE 7

Mean-Comparison Matrix for Fertility Rates per 1,000 Women Ever Married by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>2854</td>
<td>2927</td>
<td>3185</td>
<td>3239</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>2854</td>
<td>73</td>
<td>331</td>
<td>385</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2927</td>
<td>258</td>
<td>312</td>
<td>517</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>3185</td>
<td>54</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td>4</td>
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<td>3239</td>
<td>205</td>
<td></td>
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</tr>
<tr>
<td>5</td>
<td></td>
<td>3444</td>
<td>699</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
Population stability, defined as the percentage of people who lived in the same house for the past five years, serves as another demographic index which could have an effect on the racial compositions of schools. Table 8 provides the mean scores and standard deviations of each of the five distributions of the percentage of persons who have resided in the same house for the past five years. The highest group (most stable) is the isolated black residency with a mean of 56.2 percent. The next most stable type of neighborhood were tipping areas with a mean of 46.6 percent. The least stable

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolated White (0-3.9)</td>
<td>45.1</td>
</tr>
<tr>
<td>Integrated White (4-19.9)</td>
<td>42.6</td>
</tr>
<tr>
<td>Tipping (20-49.9)</td>
<td>46.6</td>
</tr>
<tr>
<td>Black (50-84.9)</td>
<td>45.3</td>
</tr>
<tr>
<td>Isolated Black (85-100)</td>
<td>56.2</td>
</tr>
<tr>
<td>Total</td>
<td>45.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>X</th>
<th>S.D.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.1</td>
<td>16.3</td>
<td>148</td>
</tr>
<tr>
<td>42.6</td>
<td>13.7</td>
<td>25</td>
</tr>
<tr>
<td>46.6</td>
<td>10.3</td>
<td>13</td>
</tr>
<tr>
<td>45.3</td>
<td>7.9</td>
<td>12</td>
</tr>
<tr>
<td>56.2</td>
<td>10.4</td>
<td>12</td>
</tr>
<tr>
<td>45.5</td>
<td>15.3</td>
<td>210</td>
</tr>
</tbody>
</table>
neighborhood from a migration point of view, were the integrated tracts which had a mean of 42.6 percent.

Table 9 shows the differences in the mean percentages of each distribution of the percentage of persons who have lived in the same house for the past five years. Isolated black areas were more stable than all other types of neighborhoods. The mean scores of the other distributions were clustered together and showed very slight differences among each other.

Another index of the stability of a neighborhood and also an index of economic status is the percentage of homes that are owner-occupied. The differences in means and standard deviations for this variable are represented in Table 10. Isolated white tracts show the highest mean percentage (62.9), followed by tipping areas (49.8), black areas (43.7), isolated black areas (41.4) and integrated areas (38.5). The largest difference between means, as noted before existed between isolated white areas and integrated areas (see Table 11). All other groups differed in mean scores from the isolated white group by a considerable amount. Tipping areas differed in mean scores from the mean scores of integrated, isolated black and black tracts to a lesser degree.

The influence of migration on the enrollment patterns of schools within Franklin County could be sizeable in view of the fact that nearly half of the residency within the average tract during a five
### TABLE 9

Mean-Comparison Matrix of Population Stability by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>2</th>
<th>1</th>
<th>4</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>42.6</td>
<td>45.1</td>
<td>45.3</td>
<td>46.6</td>
</tr>
<tr>
<td>2</td>
<td>42.6</td>
<td>----</td>
<td>2.5</td>
<td>2.7</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>45.1</td>
<td>----</td>
<td>----</td>
<td>.2</td>
<td>1.5</td>
</tr>
<tr>
<td>4</td>
<td>45.3</td>
<td>----</td>
<td>----</td>
<td>1.3</td>
<td>10.9</td>
</tr>
<tr>
<td>3</td>
<td>46.6</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>9.6</td>
</tr>
<tr>
<td>5</td>
<td>56.2</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>

1  Isolated white (0-3.9)
2  Integrated (4.0-19.9)
3  Tipping (20.0-49.9)
4  Black (50.0-84.9)
5  Isolated black (85.0-100)
TABLE 10

Means and Standard Deviations of the Percentage of Housing Units which are Owner-Occupied by Percentage Minority Residency of Franklin County Census Tract, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0. - 3.9)</th>
<th>Integrated White (4-19.9)</th>
<th>Tipping White (20-49.9)</th>
<th>Black White (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>X</strong></td>
<td>62.9</td>
<td>38.5</td>
<td>49.8</td>
<td>43.7</td>
<td>41.4</td>
<td>56.9</td>
</tr>
<tr>
<td><strong>S.D.</strong></td>
<td>25.5</td>
<td>29.0</td>
<td>23.8</td>
<td>25.5</td>
<td>12.4</td>
<td>27.1</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
</tbody>
</table>
### TABLE 11
Mean-Comparison Matrix for the Percentage of Housing Units which are Owner-Occupied by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>2</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>38.5</td>
<td>41.4</td>
<td>43.7</td>
<td>49.8</td>
</tr>
<tr>
<td>2</td>
<td>38.5</td>
<td>-----</td>
<td>2.9</td>
<td>5.2</td>
<td>11.3</td>
</tr>
<tr>
<td>5</td>
<td>41.4</td>
<td>-----</td>
<td>2.3</td>
<td>8.4</td>
<td>21.5</td>
</tr>
<tr>
<td>4</td>
<td>43.7</td>
<td>-----</td>
<td>6.1</td>
<td>19.2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>49.8</td>
<td>-----</td>
<td></td>
<td>13.1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>62.9</td>
<td>-----</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
year period is accounted for by migratory patterns (for instance, Table 8 shows that the average percentage of persons who lived in the same house for the past five years was 56.9). Because of the unique characteristics of different areas of the county, several different areas of migration were analyzed. Table 12 summarizes the differential mean percentages by type of neighborhood of persons who migrated from the central city. Black neighborhoods experienced the highest migration rates from the central city (29.4). Since most black neighborhoods are located in the central city (see Figure 13), this migration index suggests that many residents of black neighborhoods move to new areas within the black community. The same pattern seems to exist for isolated black areas (24.3), and to a lesser extent with tipping areas (27.2). Isolated white areas have the lowest mean percentage of migration from the central city (21.7).

The mean-comparison matrix found on Table 13 indicates small differences among group means, with the largest difference occurring between isolated white and black areas.

Migration patterns from other parts of the Standard Metropolitan Statistical Area (SMSA) are summarized on Table 14. The mean percentages are much smaller in this case with isolated white areas having the largest percentage mean (8.6) and tipping areas having the smallest (2.7).
TABLE 12

Means and Standard Deviations of the Percentage of Migration from the Central City by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.0-3.9)</th>
<th>Integrated White (4.0-19.9)</th>
<th>Tipping Black (20.0-49.9)</th>
<th>Black (50.0-84.9)</th>
<th>Isolated Black (85.0-100.0)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>21.7</td>
<td>23.9</td>
<td>27.2</td>
<td>29.4</td>
<td>24.3</td>
<td>22.9</td>
</tr>
<tr>
<td>S.D.</td>
<td>8.4</td>
<td>10.0</td>
<td>9.7</td>
<td>7.8</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
</tbody>
</table>
### TABLE 13

Mean-Comparison Matrix for the Percentage of Migration from the Central City by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>21.7</td>
<td>23.9</td>
<td>24.3</td>
<td>27.2</td>
<td>29.4</td>
</tr>
<tr>
<td>1</td>
<td>21.7</td>
<td>----</td>
<td>2.2</td>
<td>2.6</td>
<td>5.5</td>
</tr>
<tr>
<td>2</td>
<td>23.9</td>
<td>----</td>
<td>----</td>
<td>.4</td>
<td>3.3</td>
</tr>
<tr>
<td>5</td>
<td>24.3</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>2.9</td>
</tr>
<tr>
<td>3</td>
<td>27.2</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>4</td>
<td>29.4</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
TABLE 14

Means and Standard Deviations of the Percentage of Migration from Other Part of SMSA by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.0-3.9)</th>
<th>Integrated White (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>8.6</td>
<td>5.1</td>
<td>2.7</td>
<td>2.9</td>
<td>3.5</td>
<td>7.2</td>
</tr>
<tr>
<td>S.D.</td>
<td>5.9</td>
<td>4.3</td>
<td>1.9</td>
<td>2.1</td>
<td>3.3</td>
<td>5.7</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
</tbody>
</table>

The largest difference between mean percentage scores for each type of neighborhood occurred between isolated white census tracts and tipping areas (see Table 15). Black and isolated black neighborhoods also differed considerably from isolated white neighborhoods.

Another analysis of migratory rates were conducted for those persons moving from the South. The type of neighborhood in which most southern migration took place were black census tracts with a mean percentage of 5.3 (see Table 16). The mean-comparison matrix found in Table 17 shows the largest mean differences occurring in black areas and isolated black areas, however, the difference is quite negligible.
TABLE 15

Mean-Comparison Matrix for the Percentage of Migration from Other Part of SMSA by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>2.7</td>
<td>2.9</td>
<td>3.5</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2.7</td>
<td></td>
<td>.2</td>
<td>.8</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2.9</td>
<td></td>
<td>.6</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>3.5</td>
<td></td>
<td></td>
<td>1.6</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>8.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)


**TABLE 16**

Means and Standard Deviations of the Percentage of Migration from the South by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.1-3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>X</strong></td>
<td>3.4</td>
<td>3.5</td>
<td>3.8</td>
<td>5.3</td>
<td>3.1</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>S.D.</strong></td>
<td>2.5</td>
<td>3.5</td>
<td>2.5</td>
<td>2.5</td>
<td>1.9</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
</tbody>
</table>
TABLE 17
Mean-Comparison Matrix for the Percentage of Migration from the South by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>5</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>3.1</td>
<td>3.4</td>
<td>3.5</td>
<td>3.8</td>
</tr>
<tr>
<td>5</td>
<td>3.1</td>
<td>---</td>
<td>.3</td>
<td>.4</td>
<td>.7</td>
</tr>
<tr>
<td>1</td>
<td>3.4</td>
<td>---</td>
<td>.1</td>
<td>.4</td>
<td>1.9</td>
</tr>
<tr>
<td>2</td>
<td>3.5</td>
<td>---</td>
<td>.3</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3.8</td>
<td>---</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>5.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Isolated white (0-3.9)
2 Integrated (4.0-19.9)
3 Tipping (20.0-49.9)
4 Black (50.0-84.9)
5 Isolated black (85.0-100)
As the percentage of minority residency increased across groups, the percentage of migration from the northern and western regions of the country decreased (see Table 18).

Table 19 outlines the differences in mean percentage for each group. The largest difference was between isolated white tracts and isolated black tracts. In general as the percentage of minority residency increased, the percentage of migration from the North and West decreased.

Collectively, migration rates least affected isolated black neighborhoods (see Tables 12, 14, 16 and 18) resulting in a total migratory mean percentage of 33.8 for a five year period. On the other hand, isolated white neighborhoods experienced the greatest population changes due to migration with a total mean percentage of 47.8 (see Tables 12, 14, 16 and 18).

Enrollment in private schools can play a significant role in the racial composition of public schools. For this reason the percentages of public school enrollment were studied for the different types of neighborhoods. Table 20 shows the means and standard deviations of the percentage of kindergarten students enrolled in public schools for each type of neighborhood. The range of percentages is quite small, with integrated areas having the lowest mean percentage of public enrollment (95.7) and isolated black areas having the largest
TABLE 18

Means and Standard Deviations of the Percentage of Migration from the North and West by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.0-3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\bar{X}$</td>
<td>14.1</td>
<td>12.1</td>
<td>10.0</td>
<td>7.0</td>
<td>2.9</td>
<td>12.6</td>
</tr>
<tr>
<td>S.D.</td>
<td>11.0</td>
<td>8.9</td>
<td>13.6</td>
<td>5.7</td>
<td>1.6</td>
<td>10.8</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
</tbody>
</table>
### TABLE 19
Mean-Comparison Matrix for the Percentage of Migration from the North and West by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Means</strong></td>
<td>2.9</td>
<td>7.0</td>
<td>10.0</td>
<td>12.1</td>
<td>14.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2.9</td>
<td>---</td>
<td>4.1</td>
<td>7.1</td>
<td>9.2</td>
</tr>
<tr>
<td>4</td>
<td>7.0</td>
<td>---</td>
<td>3.0</td>
<td>5.1</td>
<td>7.1</td>
</tr>
<tr>
<td>3</td>
<td>10.0</td>
<td>---</td>
<td>2.1</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>12.1</td>
<td></td>
<td></td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>14.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
TABLE 20

Means and Standard Deviations of the Percentage of Kindergarten Students Enrolled in Public Schools by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.0-3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>95.8</td>
<td>95.7</td>
<td>97.6</td>
<td>96.2</td>
<td>98.7</td>
<td>96.1</td>
</tr>
<tr>
<td>S.D.</td>
<td>8.8</td>
<td>9.8</td>
<td>3.1</td>
<td>4.1</td>
<td>3.2</td>
<td>8.3</td>
</tr>
<tr>
<td>n</td>
<td>144</td>
<td>22</td>
<td>12</td>
<td>10</td>
<td>12</td>
<td>200</td>
</tr>
</tbody>
</table>

percentage (98.7). For all practical purposes none of the differences between group means were significant (see Table 21).

Public elementary school enrollment was generally lower than kindergarten enrollment (see Table 22). Isolated white neighborhoods had the lowest mean percentage of elementary students enrolled in public schools (87.2) and isolated black neighborhoods had the highest rate (96.0). Income differences between the two groups could have an effect on the differences in public school enrollment. The mean comparisons outlined in Table 23 for the percentage of elementary students enrolled in public schools shows larger differences between
**TABLE 21**

Mean-Comparison Matrix for the Percentage of Kindergarten Students Enrolled in Public Schools by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>2</th>
<th>1</th>
<th>4</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>95.7</td>
<td>95.8</td>
<td>96.2</td>
<td>97.6</td>
</tr>
<tr>
<td>2</td>
<td>95.7</td>
<td>.1</td>
<td>.5</td>
<td>1.9</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>95.8</td>
<td>.4</td>
<td>1.8</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>96.2</td>
<td>-----</td>
<td>1.4</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>97.6</td>
<td>-----</td>
<td>-----</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>98.7</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td></td>
</tr>
</tbody>
</table>

1  Isolated white (0-3.9)
2  Integrated (4.0-19.9)
3  Tipping (20.0-49.9)
4  Black (50.0-84.9)
5  Isolated black (85.0-100)
**TABLE 22**

Means and Standard Deviations of the Percentage of Elementary Students Enrolled in Public Schools by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0, -3.9)</th>
<th>Integrated (4, 19.9)</th>
<th>Tipping (20, 49.9)</th>
<th>Black (50, 84.9)</th>
<th>Isolated Black (85, 100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>87.2</td>
<td>90.1</td>
<td>88.1</td>
<td>92.9</td>
<td>96.0</td>
<td>88.4</td>
</tr>
<tr>
<td>S.D.</td>
<td>10.8</td>
<td>11.1</td>
<td>12.2</td>
<td>6.9</td>
<td>2.9</td>
<td>10.7</td>
</tr>
<tr>
<td>n</td>
<td>147</td>
<td>24</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>207</td>
</tr>
</tbody>
</table>
TABLE 23
Mean-Comparison Matrix for the Percentage of Elementary Students Enrolled in Public Schools by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>1</th>
<th>3</th>
<th>2</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>87.2</td>
<td>88.1</td>
<td>90.1</td>
<td>92.9</td>
</tr>
<tr>
<td>1</td>
<td>87.2</td>
<td>----</td>
<td>.9</td>
<td>2.9</td>
<td>5.7</td>
</tr>
<tr>
<td>3</td>
<td>88.1</td>
<td>----</td>
<td>2.0</td>
<td>4.8</td>
<td>7.9</td>
</tr>
<tr>
<td>2</td>
<td>90.1</td>
<td>----</td>
<td>2.8</td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>92.9</td>
<td>----</td>
<td>----</td>
<td></td>
<td>3.1</td>
</tr>
<tr>
<td>5</td>
<td>96.0</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
groups than the percentage of kindergarten students enrolled in public schools (see Table 21). Also the order of groups changed, with the largest difference occurring between isolated black areas and isolated white areas.

Differences among types of neighborhoods with regard to the mean percentage of secondary students enrolled in public schools followed the same basic pattern as the data for elementary enrollment (see Table 24). The largest difference between mean scores, as shown in Table 25, was between isolated black areas and black areas. The isolated black tracts differed from the mean scores of isolated white, integrated, and tipping areas by similar amounts. All other pairwise comparisons were small.

In summary, most students in Franklin County attend public schools, and although isolated white schools tend to have smaller percentages of public school enrollment, the differences are not significant. Another interesting result is the absence of high enrollment in private schools for tipping areas. In fact for kindergarten and secondary students enrolled in public schools, tipping areas have the second highest percents of public enrollment (see Tables 20 and 24).

Educational levels have been designated both symptoms and causes of unequal educational opportunities. Two indices of
### TABLE 24

**Means and Standard Deviations of the Percentage of Secondary Students Enrolled in Public Schools by Percentage Minority Residency of Franklin County Census Tracts, 1970**

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0, -3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>88.2</td>
<td>89.2</td>
<td>87.8</td>
<td>95.3</td>
<td>88.6</td>
<td></td>
</tr>
<tr>
<td>S.D.</td>
<td>11.6</td>
<td>14.0</td>
<td>7.6</td>
<td>11.5</td>
<td>4.5</td>
<td>11.5</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>23</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>207</td>
</tr>
</tbody>
</table>

210
TABLE 25

Mean-Comparison Matrix for the Percentage of Secondary Students Enrolled in Public Schools by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>4</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>87.8</td>
<td>88.2</td>
<td>88.3</td>
<td>89.2</td>
</tr>
<tr>
<td>4</td>
<td>87.8</td>
<td>----</td>
<td>.4</td>
<td>.5</td>
<td>1.4</td>
</tr>
<tr>
<td>1</td>
<td>88.2</td>
<td>----</td>
<td>----</td>
<td>.1</td>
<td>1.0</td>
</tr>
<tr>
<td>2</td>
<td>88.3</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>.9</td>
</tr>
<tr>
<td>3</td>
<td>89.2</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>5</td>
<td>95.3</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>

1 Isolated white (0-3.9)
2 Integrated (4.0-19.9)
3 Tipping (20.0-49.9)
4 Black (50.0-84.9)
5 Isolated black (85.0-100)
educational levels were analyzed for differences among types of
neighborhoods. Table 26 summarizes the mean percentages of high school
graduates for those persons 25 years of age and over for each type of
neighborhood. Isolated white areas had the highest mean percentage
(68.3) followed in order by integrated areas (44.4), black (40.3),
tipping (38.6) and isolated black (36.3).

Table 27 outlines all possible pairwise comparisons of group
mean differences of the percentage of high school graduates. The
largest differences in the means of distributions were found with

---

**TABLE 26**

Means and Standard Deviations of the Percentage of High School Graduates by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.0-3.9)</th>
<th>Integrated (4.0-19.9)</th>
<th>Tipping (20.0-49.9)</th>
<th>Black (50.0-84.9)</th>
<th>Isolated Black (85.0-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>68.3</td>
<td>44.4</td>
<td>38.6</td>
<td>40.3</td>
<td>36.3</td>
<td>60.2</td>
</tr>
<tr>
<td>S.D.</td>
<td>16.3</td>
<td>19.2</td>
<td>12.2</td>
<td>8.2</td>
<td>10.4</td>
<td>20.3</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
</tbody>
</table>
**TABLE 27**

Mean-Comparison Matrix for the Percentage of High School Graduates by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>5</th>
<th>3</th>
<th>4</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>36.3</td>
<td>38.6</td>
<td>40.3</td>
<td>44.4</td>
<td>68.3</td>
</tr>
<tr>
<td>5</td>
<td>36.3</td>
<td></td>
<td>2.3</td>
<td>4.0</td>
<td>8.1</td>
</tr>
<tr>
<td>3</td>
<td>38.6</td>
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<td></td>
<td>1.7</td>
<td>5.8</td>
</tr>
<tr>
<td>4</td>
<td>40.3</td>
<td></td>
<td></td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>44.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>68.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
isolated white tracts compared to each of the other four group
distributions. In general, as the gap in percentage of minority
residency increased, the differences in mean percentages increased.

A more revealing analysis of educational attainment can be
found in Table 28, in which the median school level completed by
persons 25 years of age and over was analyzed for each type of neigh­
borhood. Isolated white neighborhoods had the highest average of
median school years completed (12.7), followed by black neighborhoods
(11.0) with isolated black areas having the lowest figure of 10.6.

Comparing differences of mean scores (Table 29) resulted in
the same pattern of differences as for the percentage of high school
graduate data found on Table 27.

Indices of the quality of housing were used as rough indicators
of the type of home environment of students. The percentage of homes
built before 1940 follows a different pattern across types of neighbor­
hoods than experienced before (see Table 30). Isolated black neighbor­
hoods experience the highest mean percentage (59.1) with integrated
tracts second highest (52.6), followed by black areas (51.4), tipping
areas (40.4) and isolated white areas (21.4). The fact that isolated
black, integrated, and black residential areas experienced higher
percentages of older homes than isolated white residential areas is
probably due to geographical locations of such areas, with the prior
TABLE 28

Means and Standard Deviations of the Median School Level Completed by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.0-3.9)</th>
<th>Integrated White (4-19.9)</th>
<th>Tipping Black (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>12.7</td>
<td>10.9</td>
<td>10.8</td>
<td>11.0</td>
<td>10.6</td>
<td>12.1</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.2</td>
<td>1.3</td>
<td>1.0</td>
<td>0.8</td>
<td>0.9</td>
<td>1.4</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
<tr>
<td>Type of Neighborhood</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.6</td>
<td>10.8</td>
<td>10.9</td>
<td>11.0</td>
<td>12.7</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>10.6</td>
<td></td>
<td>.2</td>
<td>.3</td>
<td>.4</td>
<td>2.1</td>
</tr>
<tr>
<td>3</td>
<td>10.8</td>
<td></td>
<td>.1</td>
<td>.2</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>10.9</td>
<td></td>
<td>.1</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>11.0</td>
<td></td>
<td>1.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>12.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
Means and Standard Deviations of the Percentage of Homes Built Before 1940 by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White</th>
<th>Integrated</th>
<th>Tipping Black</th>
<th>Black</th>
<th>Isolated Black</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(0.0 - 3.9)</td>
<td>21.4</td>
<td>52.6</td>
<td>40.4</td>
<td>51.4</td>
<td>59.1</td>
<td>30.0</td>
</tr>
<tr>
<td>(4.0 - 19.9)</td>
<td>24.4</td>
<td>31.0</td>
<td>27.3</td>
<td>30.0</td>
<td>16.4</td>
<td>29.0</td>
</tr>
<tr>
<td>(20.0 - 49.9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(50.0 - 84.9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(85.0 - 100)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean comparison matrix found in Table 31 showed that isolated white neighborhoods consisted of considerably newer homes than each of the other types of neighborhoods. The second largest difference occurred between isolated white tracts and integrated tracts suggesting that the integrated areas in general consist of older housing.

The median value of housing units is represented in Table 32. The isolated white tracts which are located the furthest from the center of the city showed the highest mean value ($21,023). Integrated
### TABLE 31

Mean-Comparison Matrix for the Percentage of Homes Built Before 1940 by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>1</th>
<th>3</th>
<th>4</th>
<th>2</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>21.4</td>
<td>40.4</td>
<td>51.4</td>
<td>52.6</td>
</tr>
<tr>
<td>1</td>
<td>21.4</td>
<td>----</td>
<td>19.0</td>
<td>30.0</td>
<td>31.2</td>
</tr>
<tr>
<td>3</td>
<td>40.4</td>
<td>----</td>
<td>11.0</td>
<td>12.2</td>
<td>18.7</td>
</tr>
<tr>
<td>4</td>
<td>51.4</td>
<td>----</td>
<td>1.2</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>52.6</td>
<td>----</td>
<td></td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>59.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
TABLE 32

Means and Standard Deviations of the Median Value of Housing Units by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.0-3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>21,023</td>
<td>14,821</td>
<td>12,308</td>
<td>12,867</td>
<td>11,717</td>
<td>18,767</td>
</tr>
<tr>
<td>S.D.</td>
<td>8,084</td>
<td>7,899</td>
<td>4,745</td>
<td>1,775</td>
<td>2,722</td>
<td>8,264</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>24</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>209</td>
</tr>
</tbody>
</table>

areas had the next highest average value ($14,281), followed by black neighborhoods ($12,867), tipping neighborhoods ($12,308) and isolated black neighborhoods ($11,717). These differences may be due in part to income differentials. The mean differences of home value were greatest between isolated black and isolated white areas ($9,306), as indicated in Table 33. In fact isolated white home values were considerably greater in value than any of the other group means. A clear pattern exists across groups showing that the percent minority residency is strongly correlated with the value of housing units.

Several measures of economic status were analyzed, since much of the literature indicates that socioeconomic status is an often neglected, but important part of equal educational opportunity. The
TABLE 33

Mean-Comparison Matrix for the Median Value of Housing Units by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>5</th>
<th>3</th>
<th>4</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>11,717</td>
<td>12,308</td>
<td>12,867</td>
<td>14,821</td>
</tr>
<tr>
<td>5</td>
<td>11,717</td>
<td>591</td>
<td>1,150</td>
<td>3,104</td>
<td>9,306</td>
</tr>
<tr>
<td>3</td>
<td>12,308</td>
<td>559</td>
<td>2,513</td>
<td>8,715</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>12,867</td>
<td>1,954</td>
<td>8,156</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>14,821</td>
<td>6,202</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>21,023</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
differences among types of neighborhoods in the percentage of families receiving public assistance are summarized in Table 34. Mean scores range from 2.2 percent (isolated white) to 17.7 percent (isolated black) with a direct relationship to the percentage minority residency. The largest mean comparison existed between isolated black and isolated white areas (see Table 35). The differences in mean percentages of persons receiving public assistance between groups gradually reduces as the differences in percentage minority residency decreases.

Another study of economic status involved the average median income levels for each type of neighborhood. As shown in Table 36,

TABLE 34

Means and Standard Deviations of the Percentage of Families Receiving Public Assistance by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0-.3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>2.2</td>
<td>8.1</td>
<td>9.8</td>
<td>14.3</td>
<td>17.7</td>
<td>5.0</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.5</td>
<td>7.5</td>
<td>7.0</td>
<td>6.5</td>
<td>10.2</td>
<td>6.7</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
<tr>
<td>Type of Neighborhood</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Means</td>
<td>2.2</td>
<td>8.1</td>
<td>9.8</td>
<td>14.3</td>
<td>17.7</td>
</tr>
<tr>
<td>1</td>
<td>---</td>
<td>5.9</td>
<td>7.6</td>
<td>12.1</td>
<td>15.5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>---</td>
<td>1.7</td>
<td>6.2</td>
<td>9.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>---</td>
<td>4.5</td>
<td>7.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>---</td>
<td>3.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
TABLE 36

Means and Standard Deviations of the Median Income of Families by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.-3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X 11,686</td>
<td>8,891</td>
<td>8,720</td>
<td>7,653</td>
<td>6,979</td>
<td>10,688</td>
<td></td>
</tr>
<tr>
<td>S.D. 3,157</td>
<td>3,217</td>
<td>1,473</td>
<td>1,851</td>
<td>2,072</td>
<td>3,389</td>
<td></td>
</tr>
<tr>
<td>n 148</td>
<td>24</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>208</td>
<td></td>
</tr>
</tbody>
</table>

Isolated white tracts have the highest average median income ($11,686). The average median incomes steadily decrease as the percentage minority residency decreases for each type of neighborhood, with isolated black tracts having an average median figure of $6,979. As in many of the analyses undertaken, the white isolated neighborhoods represent an outlying score with the other four types of neighborhoods more closely clustered together. Table 37 shows that isolated white tracts had higher median incomes than all other groups.

Unemployment statistics in Table 38 show that black neighborhoods experience the highest average percent of unemployment for males over 16 in the labor force (7.2), followed by isolated black...
Table 37
Mean-Comparison Matrix for the Median Income of Families by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>6,979</td>
<td>7,653</td>
<td>8,720</td>
<td>8,891</td>
<td>11,686</td>
</tr>
<tr>
<td>5</td>
<td>6,979</td>
<td>-----</td>
<td>674</td>
<td>1,741</td>
<td>1,912</td>
</tr>
<tr>
<td>4</td>
<td>7,653</td>
<td>-----</td>
<td>1,067</td>
<td>1,238</td>
<td>4,033</td>
</tr>
<tr>
<td>3</td>
<td>8,720</td>
<td>-----</td>
<td>171</td>
<td>2,966</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>8,891</td>
<td>-----</td>
<td>2,795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>11,686</td>
<td>-----</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
TABLE 38
Means and Standard Deviations of the Percentage of Unemployed Males by Percentage Minority Residency of Franklin County Census Tract, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0-3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>2.6</td>
<td>5.4</td>
<td>4.2</td>
<td>7.2</td>
<td>5.8</td>
<td>3.5</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.9</td>
<td>5.1</td>
<td>1.6</td>
<td>3.0</td>
<td>3.8</td>
<td>3.0</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>25</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>209</td>
</tr>
</tbody>
</table>

neighborhoods (5.8), integrated areas (5.4), tipping (4.2) and isolated white (2.6). This pattern of means has not appeared in any of the earlier results and does not compare with the median educational levels attained in which black neighborhoods had the second highest average median school years completed (11.0 - see Table 28). For some unexpected reason some factor other than educational level is probably interacting with the percentage of unemployment, particularly for those census tracts categorized as black. Further analyses of group mean comparisons (Table 39) revealed that black neighborhoods, isolated black neighborhoods and integrated neighborhoods had higher mean percentage unemployment figures than isolated white neighborhoods.
TABLE 39

Mean-Comparison Matrix for the Percentage of Unemployed Males by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>1</th>
<th>3</th>
<th>2</th>
<th>5</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>2.6</td>
<td>4.2</td>
<td>5.4</td>
<td>5.8</td>
</tr>
<tr>
<td>1</td>
<td>2.6</td>
<td>---</td>
<td>1.6</td>
<td>2.8</td>
<td>3.2</td>
</tr>
<tr>
<td>3</td>
<td>4.2</td>
<td>---</td>
<td>1.2</td>
<td>1.6</td>
<td>3.0</td>
</tr>
<tr>
<td>2</td>
<td>5.4</td>
<td>---</td>
<td>0.4</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5.8</td>
<td>---</td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>7.2</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
The status of a particular occupation is closely related to income levels and educational attainments and has been used as an indirect indicator of the outcomes of equal educational opportunity. Particular groups of occupations reported in the census tract data were clustered into three generic categories of occupations - white collar, blue collar and laborer. Table 40 reports the results of average percentages of persons employed in white collar occupations. As expected isolated white neighborhoods showed the highest average percent of white collar employees (31.0). Integrated tracts had the next highest percent (20.0), with black residential areas (14.0)

**TABLE 40**

Means and Standard Deviations of the Percentage of Employed Persons in White Collar Occupations by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0.0 - 3.9)</th>
<th>Integrated (4.0 - 19.9)</th>
<th>Tipping (20.0 - 49.9)</th>
<th>Black (50.0 - 84.9)</th>
<th>Isolated Black (85.0 - 100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>31.0</td>
<td>20.0</td>
<td>11.2</td>
<td>14.0</td>
<td>10.7</td>
<td>26.3</td>
</tr>
<tr>
<td>S.D.</td>
<td>14.7</td>
<td>11.8</td>
<td>5.3</td>
<td>3.9</td>
<td>5.6</td>
<td>15.2</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
</tbody>
</table>
following. Tipping and isolated black neighborhoods had 11.2 and 10.7 average percent of employed persons in white collar occupations, respectively. Among the ten possible pairwise comparisons of group means, isolated white tracts showed higher percentages of persons considered to be white collar than any other type of neighborhood (see Table 41).

A similar analysis of the percentage of employed persons in blue collar occupations is summarized in Table 42. The group with the highest average percent was the tipping neighborhood (69.0). Integrated and isolated white neighborhoods followed with 58.5 and 56.9 average percents, respectively. Black neighborhoods had a slightly average percent (52.8) and the lowest figure, as was true for white collar occupations, was the isolated black tracts (49.5). In nearly all groups, blue collar occupations comprise over half of the occupations. The results showed that tipping areas have considerably higher percentages of persons employed in blue collar occupations than isolated black, black, and isolated white neighborhoods (see Table 43).

The percentages of persons employed as laborers follows a wider range than do the percentages of white collar or blue collar occupations (see Table 44). Black isolated tracts have the highest average percent of persons employed as laborers (39.8), followed by black (33.2), integrated (21.5), tipping (19.9) and isolated white (12.1).
<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31.0</td>
<td>20.0</td>
<td>14.0</td>
<td>11.2</td>
<td>10.7</td>
</tr>
<tr>
<td></td>
<td>11.0</td>
<td>20.3</td>
<td>20.3</td>
<td>20.3</td>
<td>20.3</td>
</tr>
<tr>
<td></td>
<td>19.8</td>
<td>17.0</td>
<td>17.0</td>
<td>17.0</td>
<td>17.0</td>
</tr>
<tr>
<td></td>
<td>11.0</td>
<td>11.0</td>
<td>11.0</td>
<td>11.0</td>
<td>11.0</td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
### TABLE 42
Means and Standard Deviations of the Percentage of Employed Persons in Blue Collar Occupations by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0. -3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \bar{X} )</td>
<td>56.9</td>
<td>58.5</td>
<td>69.0</td>
<td>52.8</td>
<td>49.5</td>
<td>57.2</td>
</tr>
<tr>
<td>S.D.</td>
<td>12.0</td>
<td>10.0</td>
<td>10.3</td>
<td>7.0</td>
<td>6.1</td>
<td>11.8</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
</tbody>
</table>
### TABLE 43

Mean-Comparison Matrix for the Percentage of Employed Persons in Blue Collar Occupations by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>5</th>
<th>4</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Means</strong></td>
<td>49.5</td>
<td>52.8</td>
<td>56.9</td>
<td>58.5</td>
<td>69.0</td>
</tr>
<tr>
<td>5</td>
<td>49.5</td>
<td></td>
<td>3.3</td>
<td>7.4</td>
<td>9.0</td>
</tr>
<tr>
<td>4</td>
<td>52.8</td>
<td></td>
<td></td>
<td>4.1</td>
<td>5.7</td>
</tr>
<tr>
<td>1</td>
<td>56.9</td>
<td></td>
<td></td>
<td></td>
<td>1.6</td>
</tr>
<tr>
<td>2</td>
<td>58.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>69.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Isolated white (0-3.9)
2 = Integrated (4.0-19.9)
3 = Tipping (20.0-49.9)
4 = Black (50.0-84.9)
5 = Isolated black (85.0-100)
**TABLE 44**

Means and Standard Deviations of the Percentage of Employed Persons in Laborer Occupations by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Percent Minority Residency</th>
<th>Isolated White (0. - 3.9)</th>
<th>Integrated (4-19.9)</th>
<th>Tipping (20-49.9)</th>
<th>Black (50-84.9)</th>
<th>Isolated Black (85-100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>X</strong></td>
<td>12.1</td>
<td>21.5</td>
<td>19.9</td>
<td>33.2</td>
<td>39.8</td>
<td>16.5</td>
</tr>
<tr>
<td><strong>S.D.</strong></td>
<td>5.1</td>
<td>10.9</td>
<td>9.0</td>
<td>6.5</td>
<td>9.0</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>148</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>210</td>
</tr>
</tbody>
</table>
Both isolated black neighborhoods and black neighborhoods had much greater mean percentages of persons employed as laborers than isolated white, tipping, or integrated neighborhoods. Integrated and tipping neighborhoods were also higher than isolated white neighborhoods (see Table 45).

Relationships among all of the previously mentioned variables, plus the percentage of black residency were generated by a Missing Data Correlation SOUPAC computer program. The results of these relationships can be found in Table 46. Of most importance are the correlations of various measures with the percentage black residency. The highest correlation with percent black residency is percent of persons employed as laborers (.74). The next highest correlation is with the percent of persons receiving public assistance (.68). The percent of high school graduates (-.50), median school years completed (-.44), median income (-.43), and the percent of persons employed in white collar occupations (-.43) all have moderately negative correlations with the percentage of black residency for the 210 census tracts of Franklin County.

The median number of school years completed correlates positively with median income (.72), median value of housing units (.76) and percent of persons employed in white collar occupations (.82). Negative correlations occur with respect to percent receiving public
TABLE 45

Mean-Comparison Matrix for the Percentage of Employed Persons in Laborer Occupations by Percentage Minority Residency of Franklin County Census Tracts, 1970

<table>
<thead>
<tr>
<th>Type of Neighborhood</th>
<th>1</th>
<th>3</th>
<th>2</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>12.1</td>
<td>19.9</td>
<td>21.5</td>
<td>33.2</td>
</tr>
<tr>
<td>1</td>
<td>12.1</td>
<td>----</td>
<td>7.8</td>
<td>9.4</td>
<td>21.1</td>
</tr>
<tr>
<td>3</td>
<td>19.9</td>
<td>----</td>
<td>1.6</td>
<td>13.3</td>
<td>19.9</td>
</tr>
<tr>
<td>2</td>
<td>21.5</td>
<td>----</td>
<td>11.7</td>
<td>18.3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>33.2</td>
<td>----</td>
<td>6.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>39.8</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1  =  Isolated white (0-3.9)
2  =  Integrated (4.0-19.9)
3  =  Tipping (20.0-49.9)
4  =  Black (50.0-84.9)
5  =  Isolated black (85.0-100)
**TABLE 4b**

Correlation Matrix of Selected Variables of Franklin County Census Tracts, 1970

|   | 1   | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    |
|---|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1.00|       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 2 | -0.44| 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 3 | -0.43| 0.72  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 4 | 0.68 | -0.65 | -0.64 | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 5 | -0.37| 0.76  | -0.51 | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 6 | -0.25| 0.31  | 0.67  | -0.45 | 0.50  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 7 | 0.38 | -0.56 | -0.58 | 0.60  | -0.49 | -0.45 | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 8 | 0.39 | -0.45 | -0.54 | 0.56  | -0.42 | -0.41 | 0.44  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 9 | 0.23 | -0.27 | -0.24 | 0.44  | -0.10 | 0.07  | 0.45  | -0.33 | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 10| 0.13 | -0.16 | 0.22  | 0.03  | 0.03  | 0.56  | -0.06 | -0.15 | 0.19  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 11| 0.18 | -0.31 | -0.32 | 0.30  | -0.29 | -0.18 | 0.21  | 0.14  | 0.17  | -0.27 | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 12| -0.33| 0.32  | 0.39  | -0.32 | 0.40  | -0.28 | 0.30  | -0.30 | 0.12  | -0.10 | -0.31 | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 13| -0.26| 0.42  | 0.01  | -0.25 | 0.12  | -0.43 | -0.18 | -0.02 | -0.34 | -0.73 | -0.23 | -0.05 | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |
| 14| 0.09 | -0.04 | -0.11 | 0.09  | 0.05  | -0.32 | -0.06 | -0.26 | 0.03  | -0.54 | 0.11  | -0.04 | 0.31  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |
| 15| -0.43| 0.82  | -0.52 | 0.75  | -0.22 | -0.46 | -0.42 | -0.33 | -0.13 | 0.28  | 0.24  | 0.37  | -0.03 | 1.00  |       |       |       |       |       |       |       |       |       |       |       |
| 16| -0.11| 0.52  | -0.36 | -0.01 | 0.53  | -0.06 | 0.03  | 0.05  | 0.01  | 0.16  | 0.21  | -0.05 | -0.28 | -0.16 | -0.73 | 1.00  |       |       |       |       |       |       |       |       |
| 17| 0.74 | -0.60 | 0.69  | 0.76  | -0.51 | -0.39 | 0.64  | 0.56  | 0.48  | 0.01  | 0.17  | -0.30 | -0.22 | 0.13  | -0.63 | -0.07 | 1.00  |       |       |       |       |       |       |       |       |
| 18| 0.10 | -0.07 | 0.25  | 0.03  | 0.19  | 0.58  | -0.28 | -0.02 | 0.45  | 0.26  | 0.16  | 0.22  | -0.49 | 0.07  | 0.15  | 0.16  | 0.03  | 1.00  |       |       |       |       |       |       |       |
| 19| -0.08| 0.03  | -0.42 | -0.03 | 0.10  | -0.37 | -0.53 | 0.01  | 0.09  | -0.17 | -0.54 | 0.39  | -0.11 | 0.30  | 0.23  | -0.02 | -0.05 | 0.03  | -0.29 | 1.00  |       |       |       |       |       |
| 20| 0.11 | 0.04  | -0.14 | 0.13  | -0.09 | -0.04 | 0.05  | 0.06  | 0.14  | -0.18 | 0.01  | -0.26 | 0.09  | 0.08  | -0.11 | -0.02 | 0.19  | 0.26  | 0.08  | 1.00  |       |       |       |       |       |
| 21| 0.23 | -0.25 | 0.37  | -0.25 | -0.32 | 0.24  | 0.15  | 0.20  | 0.13  | 0.25  | 0.12  | 0.09  | 0.06  | 0.20  | -0.35 | 0.12  | 0.37  | 0.11  | 0.18  | 0.58  | 1.00  |       |       |       |       |       |
| 22| 0.07 | -0.16 | -0.24 | 0.14  | 0.20  | -0.09 | 0.10  | 0.11  | 0.05  | -0.18 | 0.13  | 0.02  | 0.05  | 0.11  | 0.21  | 0.12  | 0.18  | 0.08  | 0.10  | 0.22  | 0.34  | 1.00  |       |       |       |       |       |
| 23| -0.50| 0.91  | -0.70 | 0.75  | 0.35  | -0.65 | -0.49 | -0.31 | -0.15 | -0.29 | 0.33  | 0.38  | 0.06  | 0.86  | -0.51 | 0.68  | -0.00 | -0.02 | -0.08 | 0.31  | -0.20 | 1.00  |       |       |       |       |       |
TABLE 46 (continued)

1 = percent black residency
2 = median school level completed
3 = median income
4 = percent receiving public assistance
5 = median value of housing units
6 = percent owner occupied housing units
7 = percent homes built before 1940
8 = percent unemployment for males
9 = fertility rate
10 = percent population stability
11 = percent migration from central city
12 = percent migration from other part of SMSA
13 = percent migration from North and West
14 = percent migration from South
15 = percent persons employed in white collar occupations
16 = percent persons employed in blue collar occupations
17 = percent persons employed in laborer occupations
18 = percent population under 18 years of age
19 = percent population under 18 years of age who are under 5 years
20 = percent of secondary students enrolled in public schools
21 = percent of elementary students enrolled in public schools
22 = percent of kindergarten students enrolled in public schools
23 = percent of high school graduates
assistance (-.65), percent homes built before 1940 (-.56), percent unemployment for males (-.45), percent of persons employed in blue collar occupations (-.52) and in laborer occupations (-.60).

Median income levels have strong relationships to the median value of housing units (.87), percent of persons employed in white collar occupations (.75) and percent of high school graduates (.74). Moderate correlations exist among the percent receiving public assistance (-.64), percent of owner occupied housing units (.67), percent of homes built before 1940 (-.58), and the percent of persons employed as laborers (-.69). The percentage of owner-occupied housing units correlate positively with the percent of the population living in the same house for at least five years (.56), and with the percent of population under 18 years of age (.58). A negative relationship (-.53) exists in relation to the percentage of the population under 18 who are under 5 years of age. Remaining correlations of importance include relationships of the percent of homes built before 1940 to the percent of persons employed as laborers (.64) and the percent of high school graduates (-.65); the percent of unemployment with the percent of persons employed in laborer occupations (.56); the percent of population stability and the percent of persons under 18 who are under 5 years of age (-.54).
Chapter VI

SUMMARY AND CONCLUSIONS

Extensive research has been undertaken in the area of equal educational opportunities, precipitated largely by the landmark Supreme Court decision of Brown v. Board of Education in 1954 and the subsequent civil rights movement of the 1960's. Some of the largest educational research projects ever undertaken (e.g. Racial Isolation in the Public Schools and Equality of Educational Opportunity) focused on describing the extent of quality education of all races of American people. These reports and others have had a significant part in shaping the concept of equal educational opportunity.

The conceptual definition of equal educational opportunity has been broadened to include outcome measures of schools and environmentally-related variables. Educational matters related to equal educational opportunity have also been increasingly removed from the profession of educators to that of legal counselors.

Because of the increased attention given to equal educational opportunity; legal issues, demography, and various socio-cultural measures have become more important to school boards and superintendents.
The review of related literature disclosed that most studies related to school desegregation and its effects on student outcomes lacked the scientific rigor necessary to make broad conclusions. However, the vast majority of research conducted to date indicates an integrated school experience is a benefit to students of all races.

Many studies and essays on how or whether schools have an obligation to provide equal educational opportunities have appeared in various educational, sociological and psychological journals. However, the legal guidelines shaped by federal courts have over-shadowed the results of educational research and debate. The concept of de jure segregation, once confined to the 17 southern and border states has been broadened and is being applied to every state of the union.

Federal intervention into school-related matters has increased at an exponential rate since the early 1950's. School policy and decision making related to the placement of pupils in school buildings has become one of the most demanding tasks of school officials.

The various legal cases which were analyzed have differential levels of generalizability. Naturally, those cases decided by the Supreme Court have applicability to all public school districts in the country. The Appellate court cases have generalizability to those states within its jurisdiction. These cases also have the potentiality of being appealed to the Supreme Court for further review, and in many instances can influence the thinking of the Supreme Court.
District court cases have the least generalizability, but serve as indicators of possible future legal trends, and for the most part establish legal precedents.

Based upon the legal analysis of significant federal court cases related to equal educational opportunities over the past two decades, it seems inevitable that the federal courts will continue to play a significant role in shaping local educational policy. Part of this role will undoubtedly consist of further delimiting the de jure - de facto segregation distinctions. Numerous District and Appellate court judges in addition to several Supreme Court justices have written legal opinions regarding the artificial distinction between the two forms of segregation. The concept of inter-district remedies to counteract racial residential differences between cities and suburbs, although difficult to prove in court, remains a viable alternative for northern metropolitan areas. Although the Supreme Court has refused to condone specific racial balances and ratios for each school within a district, the existence of all black or all white schools in a district having a sizable minority population, puts the school system in a position of explaining why such schools have one-race populations.

Federal courts have increasingly utilized the results of educational and psychological studies to support legal decisions. Demographic studies of local school conditions have also found widespread acceptance in federal courts both as evidence during litigation,
and as part of the solution of dismantling a dual school system.

Regardless of the outcomes of any educational research or public opinions for or against desegregated schools, federal courts have consistently stressed that the application of the law supercedes the results of any educational studies when such results or opinions are in conflict with the equal protection clause or any other part of the Constitution.

The analyses of demographic and socio-cultural variables have generalizability limited to the public schools of Columbus having 6th-grade classes and to the census tracts of Franklin County. Distributions of the percent minority enrollment and residency of schools and census tracts were skewed heavily toward all white schools and neighborhoods.

Eleven different variables related to the 6th-grade classes of Columbus public schools were analyzed. The five variables considered to describe the students' backgrounds and school environments showed some differences according to the percent black population of the school. Measuring differences in aid to dependent children (ADC) revealed that in general as the percentage of minority population increased, so did the percentage of ADC. The fact that isolated black schools have the highest percents of ADC may be the result of a high correlation of race with income. Many research studies point out that socioeconomic status may be more important than race in raising achievement levels in integrated settings, indicating that school
planners should in addition to race, consider socioeconomic classroom desegregation. Columbus did not show any differences among types of schools with respect to the percentage of students living in substandard housing.

As schools tended to become more heavily populated with black students, the percentages of students from broken homes tended to increase. Children from intact families tend to have a more stable home background and usually display better academic success than their counterparts. Remedial programs for schools having a high percentage of students from broken homes can be implemented for those schools that most need it. The results of the Coleman Report showed that the home backgrounds of fellow students also played a role in the academic success of a student. By utilizing this factor, in addition to race and socioeconomic status when formulating attendance boundaries, the achievement levels of students from broken homes could be raised.

For all practical purposes, the attendance rates for each type of school were similar, ruling out the possibility that differential attendance patterns accounted for different achievement results.

The percentage of minority staff in a given school or category of schools becomes important to school officials, if discriminatory practices of assigning teachers to schools has taken place. Of the public schools studied, a direct positive relationship existed between
percentage of black staff and percentage of black students. The limited number of studies reviewed in this area indicate that the race of the teacher has little bearing on the achievement scores of students, both black and white. However, the legal implications of faculty segregation has become an increased concern of many school systems. The results of this particular analysis serve only to show that in general black teachers teach black students and white teachers teach white students. No conclusions can be drawn regarding any specific legal violations.

Each of the six measures of achievement showed similar patterns across types of schools with average achievement scores dropping as the percentage of black students increased. Large overlaps did occur, however, between groups of schools.

It must be stressed that the achievement figures which were used as units of measure were mean scores for each school, and as such represented the average of many achievement scores. The effect of race alone on achievement scores cannot be ascertained from these averages since the factor of race has not been partitioned from the average scores.

The results did not show that desegregated schools did, in general, achieve higher than tipping, black, and isolated black schools. Two different policy recommendations could emanate from such
findings - 1) if school buildings have acquired their racial compositions as a result of de facto segregation, remedial programs could be instituted in those schools that have large black populations; 2) if school buildings have been de jure segregated, or if school authorities have an affirmative program to desegregate its schools, acquiring a racial balance in each school such that black students could gain from the interaction and competition with white students could become a system-wide goal. Since the data unit used in this analysis was a composite score for a school, the results can only point out general differences among types of schools. More specific information, particularly the individual student's achievement scores, race, socio-economic status, and geographical residence are needed to maximize the effectiveness the school environment can have on an individual student, and the schools as a whole.

The school analysis showed that isolated black schools suffered most on standardized achievement measures with sizable differences in achievement occurring, particularly with isolated white schools. Similarly, variables describing the home environments of students in isolated black schools, e.g. incidence of broken homes, incidence of substandard housing and incidence of welfare, were much higher than other types of schools.
Schools which had desegregated populations had lower achievement rates than isolated white schools, although the range of scores for desegregated schools was wide and exceeded many of the scores of the isolated white schools. Since the study was cross-sectional, no determination if a school's population composition had remained relatively stable over the years, had been made. A longitudinal study taking this factor into account may result in higher achievement rates for desegregated schools.

Twenty-two variables were analyzed from the 210 census tracts of Franklin County, reflecting general demographic and socio-cultural patterns.

The percentage of population under 18 years of age can be used to determine the needs of school building capacity in different areas of a school system and for different types of schools. In the Franklin County study black and isolated black neighborhoods had higher percentages of school age children than did isolated white areas or integrated areas. Decisions affecting the closing of old schools and the construction of new ones should not only consider the geographical locations of high percentage school-age areas, but also the racial makeup of these areas to prevent the possibility of discriminatory practices.

The percentage of pre-school children within the population of people under 18 years of age can help to determine the geographical
and racial trends of population increases. This information can be helpful in determining construction sites of new buildings such that they will not perpetuate segregation. In Franklin County, little difference exists among the percentages of pre-school children for each type of neighborhood, except for isolated black neighborhoods, which have the lowest (23.6) mean percent of pre-school children.

Differential fertility rates can have a significant effect on both the racial composition of neighborhoods and schools. In Franklin County, isolated black areas display the highest fertility rates. In time the increased birth rates could result in the overcrowding of schools serving these areas. The general racial composition of the entire county will also change in all likelihood because of the apparent effect that race has on fertility, which could have long term effects on the racial composition of schools.

Population stability, defined by those persons who have remained in the same house for the past five years, can provide school planners with knowledge of population patterns for specific areas. In Franklin County the isolated black areas located in the near east side of the city are the most stable. The least stable areas are those classified as integrated. These results are probably indicative of white flight, although a longitudinal study would be necessary to validate this hypothesis. When taking into account geographical locations, population stability, and time, patterns of white flight can be
determined. Possible strategies to circumvent or take into account such population patterns and their subsequent effects on school attendance patterns may then be undertaken.

Another general index of the stability of housing is the percentage of home ownership within a neighborhood. For Franklin County isolated white neighborhoods have the highest mean percentage of home ownership and integrated areas have the lowest mean percentage of home ownership. This supports the phenomenon of white flight, particularly in view of the geographical locations of census tracts by percent black residency.

Various measures of migration patterns are readily available in census tract data. Separately these migration patterns can identify the locations from which persons are moving, enabling predictions to be made regarding the type of students who are moving into a school system. Collectively, migration patterns can provide indices of changing school populations, and identify which particular neighborhoods are most affected by such patterns.

Migration rates from the central city are another indicator of white flight. The patterns of migration from the central city for each of the five types of neighborhoods show black areas as having the highest rate of this type of migration and isolated white areas the lowest. These results are not surprising in light of the fact that the most heavily populated black areas are located in the central city. The
average percent migration of 24.3 for isolated blacks indicates that many residents in these neighborhoods move short distances within their neighborhoods. This could be a result of not having any other alternatives, since this type of neighborhood has the lowest income levels and has the least expensive type of housing. Since the residential types of neighborhoods occur in belts with the outlying areas being the most expensive and populated by the least percent of blacks, isolated white areas would be expected to have the lowest migration rates from the central city. Likewise the black neighborhoods are those closest in income and geographic proximity to the central city, increasing the chances of a high percentage of migration from the central city.

Migration patterns from other parts of the Standard Metropolitan Statistical Area (non-central city) can help determine cross town residential changes, which can have an impact on the racial makeup of local schools. Isolated white areas have the highest mean rate although this rate is low in comparison to other types of migration. The isolated black tracts found in the central city have an average of only 3.5 percent migration from outlying areas of the city and suburbs into the central section of the city. These patterns probably would not affect the racial composition of local schools as much as migration from the central city does. Tipping areas have the smallest migration rate from other areas of the SMSA probably because those type of
neighborhoods exemplify outward migration patterns from the central city to the suburbs and outlying areas of the city (tipping areas have the second highest percentage of migration from the central city).

Black and isolated black areas show the highest migration rates from the South and the lowest from northern and western states. Isolated white areas and integrated areas showed the opposite pattern. These patterns generally support national migration patterns in which southern blacks tend to migrate to heavily black sections of northern cities. Another important concern that can cause drastic changes in the racial composition of local schools is the percentage of students who are enrolled in private schools. Nationally, the private school enrollment is heavily populated by white students, while major urban public schools are composed of increased percentages of black students. In part these differences in racial composition have been attributed to income levels and also a unique form of white flight. The Franklin County census data show in general that a large majority of students attend public schools. As expected, isolated white tracts have lower rates of public school enrollment than black or isolated black neighborhoods, however these differences are relatively small.

The percentage of high school graduates and the median school level completed serve as general indicators of the educational environments of each type of neighborhood. These measures also serve as a general outcome measure of educational opportunity. Generally as the
percentage of minority residency increases, educational attainments decrease. Only the isolated white tracts had an average of more than a high school education, the amount of education considered by many to be a minimal amount needed for obtaining good employment.

Several variables related to housing characteristics also can be used as indicators of home environments. The percentages of homes built before 1940 serve as an index of the age of housing structures within a neighborhood. Large differences occur between isolated black and isolated white areas. The average median values of homes between the two groups also differ by nearly $10,000. The general conclusion that can be drawn is that the residents of isolated black tracts in Franklin County live in significantly poorer housing. The poor quality of homes may be contributing to poor study habits and consequently poor achievement. Intimate knowledge of where inadequate housing exists within a metropolitan area can have an influence on decisions of public housing projects, the placement of which could determine the racial composition of local schools.

The percentage of families receiving public assistance serves as another indicator of home environment and socioeconomic status. Since background factors other than race have been shown to have an effect on academic achievement, particularly socioeconomic status, the percent of welfare recipients in a neighborhood can have an effect on the ultimate achievement rates of local schools. Mixing poor white
students with poor black students in classrooms does not raise achievement levels as much as having poor black students and affluent or middle income white students in the same classrooms. For Franklin County, as the type of neighborhood increases in black residency, the percentage of welfare recipients' increase. This typifies the close correlation between race and income. Results similar to those of the percentage of welfare recipients were found for measures of median income.

Employment and occupational patterns can also indirectly affect school achievement and also serve as general outcome measures of educational opportunity. The cyclical nature of low educational levels, low occupational status and low income levels have limited the opportunities of lower income families. When these limitations are compounded by segregated racial residential patterns, the construction of attendance patterns takes on added dimensions. The unemployment pattern of Franklin County shows black tracts as having the highest average unemployment, yet this type of neighborhood had the second highest median school level completed. This seemingly incongruous result may simply be due to prejudicial employment practices. White collar occupations are more prevalent as the percentage of black residency decreases. Tipping neighborhoods have the highest average percentage of blue collar occupations, and isolated black tracts have the highest average percentage of laborer occupations. In general
blacks are relegated to lower status jobs and have the highest unemployment rates. This results in lower income levels, lower quality housing and poorer home environments. By drawing attendance patterns to facilitate the interactions of students of different racial backgrounds and difference socioeconomic backgrounds, achievement levels should increase. In time increased educational attainments coupled with reductions in prejudicial acts should reduce many of the gaps in employment measures.

Although the school district has identified the census tracts that overlap attendance boundaries for each school, isomorphic relationships do not exist. As a consequence, census tract data, which more comprehensively describe the environmentally related variables impacting on equal educational opportunity cannot be fully utilized to study direct relationships of socio-cultural data on educational matters. If school attendance lines could be drawn co-terminus with census tract lines, conclusions of a much broader nature could be made regarding the relationships of school data and community data.

Another limitation of the Columbus SMSA census tract data which was uncovered was the unexpected number of census tract boundary changes that occurred between 1960 and 1970. As a result of the significant number of boundary changes, the comparability of tracts for the two censuses were severely limited. Demographic changes by census tract could not be made without extensive
referencing to individual block by block data.

The presentation of school related data was limited to a cross-sectional viewpoint. By analyzing future school data in a similar manner changes in school patterns and future trends can be better analyzed.

The analyses of community data revealed significant differences between isolated white census tracts and isolated black census tracts for many of the socio-cultural measures. Many of the demographic variables especially those dealing with migration rates, however, showed only slight differences among types of residential areas. Isolated black neighborhoods, in general had the lowest income levels, educational levels, percentage of home ownership, occupational status and migration rates. These neighborhoods also had the highest rates of population stability and fertility rates which could account for the higher rate of growth of the black population in Franklin County compared to the white population.

The geographical locations of each type of neighborhood showed a large degree of racial residential segregation. Isolated black neighborhoods were congested near the central city and were surrounded by concentric circles of residences which increased in the percentage of white residency the further removed from the central city the tract became.
Integrated census tracts tended to display low income and educational levels, suggesting that schools that drew their attendance from such areas were missing the critical middle class population from which both black and lower income students supposedly benefit.

Community information in the form of census tract data can provide school officials with useful indices of the backgrounds of students, particularly if this information is systematically collected and analyzed. General comparisons can be made between the school and community information due to the clustering of types of census tracts and the general adoption of a neighborhood school policy by the public school system. Remedial programs, restructuring school zones to maximize achievement, and monitoring the contextual backgrounds of student home environments are only a few of the possibilities that can prove to be significant contributions to improving the public educational system for all students.
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