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#### ABSTRACT

The present status of the Elementary and Secondary School Desegregation Study, funded by the United States Commission on Civil Rights and currently underway, was evaluated. The study is designed to investigate the relationship between type and extent of desegre- gation activity and the resultant level of desegregation in the schools. This study is valuable for a number of reasons. First, the existing research literature has not helped our understanding of this particular question. The contractor, Unicon, has made excellent efforts to improve on the data with which it was originally supplied. It has hired a specialist in individual desegregation plans to search court records and Department of Justice records for details of plans. Other data collection efforts should be to consider data from other sources and to conduct a phone survey and follow-up of districts for which available records do not indicate the presence of a plan. By concentrating on how established patterns of student and population movement are altered by intervening plans of different types, the Unicon analytical plans will be able to obtain estimates of policy effects that are reasonably free of the contamination of extraneous factors. Many specific aspects of the analysis have yet to be worked out, but none of them are unusual. The Unicon researchers are experienced, knowledgeable, and skilled. In summary, this is perhaps the most important research activity that the Commission could undertake. (KH)



Evaluation of the School Desegregation Study

Prepared for the U.S. Commission on Civil Rights

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# Evaluation of School Desegregation Study

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Over the past several weeks I have evaluated the current state of the Elementary and Secondary School Desegregation Study that has been funded by the U.S. Commission on Civil Rights. This report details my views on the qualifications and capabilities of the current contractor, on the condition of the data collection and analytical efforts, and on the ultimate feasibility of the study given where it is now.

It is my summary opinion that the analysis that is contemplated is inherently important and will greatly expand our knowledge about key policy issues. Moreover, Unicon is particularly well-suited to do this analysis. They have made substantial progress in recovering from a very bad situation: Now there are reasonable prospects for doing useful analysis, where the same probably could not have been said six months ago.

## Background

In January 1986 I was asked to provide an independent assessment of the school desegregation analysis that is currently underway. I had previously been aware of the existence of the study, and I had read several accounts of the public statements by Dr. Gary Orfield at the time of his resignation from the advisory panel for the study. However, until last month I had neither considered the study's objectives nor followed how the research was to be conducted.

I have taken my charge from the Commission to be the conduct of an evaluation of the study plan and the prospects for developing useful analysis. This would include an evaluation of the research capabilities of the current contractor, Unicon Research Corporation. But, it would be entirely forward looking. It would not include any evaluation of the operation of the previous contractor (SDC), of the deliberations or procedures of the Advisory Panel, or of other aspects of the history of this project except in so far as these might be relevant to the future prospects for the analysis.

I am trained as an economist and have been involved in research and policy analysis related to elementary and secondary schools for close to twenty years. This involvement began with my participation in the Harvard seminar that studied the original "Coleman Report", <u>Equality of Educational Opportunity</u>, and has been continued in my own research since then. While the focus of much of my own work has not been directly on integration or desegregation, such issues clearly



cannot be ignored in any systematic research into schools. Therefore, I have both followed research in this area and produced some related work.

On January 30, 1986, Professor Peter Mieszkowski and I spent a day with the researchers at Unicon. This had followed a preliminary reading of the original RFP, of the SDC proposal, and of various intervening documents discussing changes in the analytical design. During the day at Unicon, we reviewed the current state of the data collection effort and discussed the future analysis plans.

# Nature of the Research

The project is directed at answering a simple, but extremely important policy question: What is the effect on desegregation of using different policies to bring about that desegregation? Over the past two decades, a wide variety of desegregation plans have been applied to different school systems. These range from very rigid and detailed plans imposed by the courts to somewhat more amorphous plans voluntarily entered into by the districts themselves. The methods of achieving desegregation have also differed widely, including mandatory reassignment of virtually all students in a district, development of magnet schools, open enrollment programs of various types, and alterations of attendance boundaries. The USCCR study is designed to investigate the relationship between type and extent of desegregation activity and the resultant level of desegregation in the schools.

Somewhat surprisingly, we do not have a good understanding of the ultimate effects of these different desegregation policies. Given the importance of the policy issue and the emotions that are involved, it seems natural to believe that researchers would have provided reasonably definitive answers as to the efficacy of different approaches to school desegregation. They have not. While a large body of research related to general questions of desegregation is available, very little of it has been directed at providing systematic evidence about the effectiveness of different types of desegregation plans.

There are a variety of explanations for the lack of current understanding. Most importantly, the research is inherently difficult to do. Across school systems, desegregation efforts have occurred at different times, with varying degrees of local commitment, and with differential enforcement from the courts and federal agencies. The plans themselves differ in details that are difficult to describe in any systematic manner. And, school desegregation efforts are but one factor entering into the determination of where and under what circumstances children attend specific schools. The natural movement of employment and residential locations, the quality of particular teachers and schools, the costs of both schools and other public services, and the varying patterns of housing costs each affects observed school attendance factors. To be useful for policy deliberations, the research must be able to separate these various influences.



Existing studies have only looked at part of the general issue and have been the subject of considerable criticism on methodological grounds. The state of desegregation depends, in simplest terms, on the potential for interracial contact and the evenness of distribution of racial groups across a school system. The available studies tend to concentrate on one or the other of these: The potential for contact at least in a dynamic sense is analyzed by looking at mobility patterns, or "white flight" as it is often labelled in this literature; the racial distribution of the school age population is usually measured and analyzed by indexes of desegregation. Separating these two research issues is not appropriate in the context of considering the efficacy of various policies toward desegregation of the schools. Further, the studies that have been done of each tend to concentrate on a limited set of factors that might explain the observed outcomes and with few exceptions have not identified the specific policy choices that are made in the area. The limited set of factors entering into the analysis will, without extreme care, lead to serious statistical problems that then bring any results into question.

### Data Requirements

Since it is not possible to conduct scientific experiments that provide evidence about the effectiveness of the different policies, an essential part of any study is the systematic collection of data across a wide variety of school and nonschool circumstances. Natural variations in the behavior of individuals and schools and in the form of desegregation plans must provide the basis for separating the effects of different factors. Unfortunately, for the purposes of making reliable policy judgments, sufficient data on both desegregation outcomes and desegregation plans and on other characteristics of school districts have not been available. <u>Constructing a data set that</u> <u>contains detailed and reliable information of this sort is one</u> <u>extremely valuable aspect of the current study</u>.

The data collection and the analysis must be carefully coordinated, and the reliability of any analytical results is highly dependent upon the quality of the data. It is essential that the semple of school systems be representative of the population. The various kinds of desegregation plans must be characterized in ways that are suitable for the subsequent statistical analysis. The data must be carefully checked for reporting and coding errors. And, the information collected must match in scope the range of important influences on the structure of schools and location patterns. Each of these necessary features of the data collection effort is made difficult by the fact that the analysis is retrospective; certain things, such as matters that rely upon detailed recall of data by individuals, generally cannot be included because of reliability problems. Furthermore, dealing with the problems associated with retrospective construction of a data base often requires sophisticated and artful statistical analysis.



The minimal data requirements are for accurate school-by-school information on students by race and year and for detailed descriptions of existing desegregation plans. Other kinds of data, such as detailed facts about employment patterns and changes of areas, would be useful, but their availability is not as crucial. The application of appropriate statistical analyses can frequently make up for missing data of this sort.

# Current State of the Data

The Unicon effort has followed two major lines. First, considerable effort has gone into the preparation and cleaning of data provided by SDC. Second, a new effort to record and characterize desegregation plans has been begun.

In my opinion, analysis based solely on the data originally supplied to Unicon would be impossible. The major problems relate to the development of data on desegregation plans within separate districts. Individual school systems were asked to provide details of previous desegregation plans either through completion of a lengthy questionnaire or through interviews by a SDC employee who visited the system. The data sought were very detailed information about actions taken over the past fifteen years. These data, such as the numbers of students by race and grade involved in the pairing of schools under a 1973 plan, are not normally kept by a school system. If they once had been recorded, it would be extraordinarily lucky if the current official receiving the survey questionnaire could locate the records. Simply put, comprehensive and reliable plan data cannot be collected in this manner. Even a cursory analysis of the responses by schools to the SDC survey indicates that most of these data are simply unusable.

After some initial efforts to clean these data on plans, Unicon made an entirely appropriate decision to collect most plan information in a different manner from different sources. The Unicon strategy has been to hire an individual (Dr. Michael Ross) who has extensive background in individual desegregation plans to search court records and Department of Justice records for the letails of plans. While not without its problems, this appears to be an entirely sound strategy and one that offers reasonable chances of success.

The largest potential problem with this approach is that some plans might be overlooked or incompletely recorded. Truly voluntary plans for districts cannot be found in this way. Also, some of the details--say the pairing of specific schools--may be hard to find in the written records. To some extent, missing the details can be circumvented through detailed analysis of data; that is, some of the events such as school pairings can be readily seen in the individual school records. By combining data from other sources, such as the Department of Education survey of the availability of magnet schools in different districts, external checks can be brought to bear. Nevertheless, plans for future data development should almost certainly



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include provision for phone survey and follow-up of districts, particularly those districts for which available records do not indicate the presence of a plan. The most important issues to be addressed through such a phone effort would be whether or not plans were in existence in any year and the general type of desegregation instrumer<sup>5</sup> used.

While there were numerous errors in the enrollment data set, these were not fatal and could be corrected. Such data cleansing efforts are expensive and require considerable sophistication and skill. However, this process appears to be well under control and will be completed by Unicon soon. This in itself will be an important accomplishment since they will provide more accurate enrollment data than has been available and since these data have been central to many of the largest and most systematic studies of school desegregation or white flight.

While not yet complete, current efforts to prepare a usable data set are well on their way and promise to produce the best data set ever available for understanding the course and pattern of school desegregation.

## Analysis Plans

Previous research provides some insights into the patterns of racial isolation in the schools, into the differences that evolve over time due to movements of the population and due to court judgments, and into the importance of various community factors such as attitudes, past history, and the like. However, in part owing to the unavailability of suitable data, these analyses have fallen short of providing reliable and systematic answers to basic policy questions about the effects of specific instruments used in bringing about school desegregation.

The Unicon analytical plans, while not completely detailed at this time, center on understanding the dynamics of population movement and school changes. By concentrating (in a statistical sense) on how established patterns of student and population movement are altered by intervening plans of different types, they will be able to obtain estimates of policy effects that are reasonably clear of the contamination of other, extraneous factors. Further, in many cases they will be able to identify specific segments of a school system that are directly affected by desegregation plans and other segments that are not directly affected; this provides a natural "control group" that can be exploited to refine estimates of the independent effects of desegregation efforts.

There are many specific aspects of the analysis yet to be worked out. For example, past researchers have used a variety of summary statistical measures that are designed to capture the character of the racial distribution across schools. Some decisions will need to be made about which of the measures to apply. (Presumably a variety will ultimately be analyzed both to link this work to previous analyses and



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to understand whether or not the results are particularly sensitive to technical measurement issues). Other matters, such as the appropriate way for combining districts of different types (by size, location, etc.) must be developed along the way. However, these are the normal types of issues that are addressed in any analysis.

# Evaluation of Unicon Research Corporation

The researchers at Unicon have extensive analytical experience, are very familiar with the existing research, and have indicated a degree of sophistication well beyond that of most previous researchers in this area. Therefore, there is every reason to believe that this analysis, when completed, will become the benchmark for understanding school desegregation policies.

Unicon Research Corporation is relatively small, but it has a very powerful analytical capability. It was founded by Dr. Finis Welch, a truly notable economist with extensive experience in statistical analysis. Dr. Welch and his co-workers have experience not only with relevant statistical work but with data collection and preparation. For example, Unicon was asked by the National Science Foundation to analyze the sampling and reliability of the Panel Study on Income Dynamics, a major data resource for social scientists.

The obvious deficiency of the Unicon researchers is background in the specifics of desegregation plans, but that deficiency has been corrected by hiring Dr. Michael Ross to research and prepare plan data. Dr. Ross is one of the most experienced researchers in the area of desegregation plans and combines an academic background with many years of direct involvement in desegregation matters. Combined with the knowledge and experiences of the members of the Advisory committee, this lack of background by Unicon appears to be adequately compensated for.

The primary analytical tasks are ones that Unicon is very well suited for. They involve the statistical analysis of complicated data sets in which the dynamic structure is particularly important. These are the types of casks that applied econometricians are best able to deal with (as compared to other social scientists or applied statisticians). Among applied econometricians, Dr. Welch is one of the best. This is evidenced by his extensive publication record, by his election as a Fellow of the Econometric Society, and by his service on various editorial boards, advisory committees, and the like.

Previous involvement in the analysis of desegregation issues is most critical when it comes to developing the data base for existing desegregation plans in different districts. Such experience is much less important when it comes to the actual analysis. During the analytical phase, experience with statistical methodology, the handling of large panel data sets, and so forth is much more critical. Unicon seems well situated for this analytical phase.



#### Summary Recommendations

In my opinion, this is perhaps the most important research activity that the U.S. Commission of Civil Rights could undertake. The process of school desegregation is one of the most important issues of public policy of the past three decades. Yet, our understanding of the impacts of different policies is by any standards remarkably primitive.

The current study would enhance considerably our understanding. It is developing an important new data set that will allow a wide variety of investigations to be conducted. The analytical plans are sound. And, the policy questions are central to the entire area.

This research is clearly expensive, but the value is also high. The development of reliable and comprehensive historical data bases is a difficult and time consuming task. Nevertheless, since such weighty decisions as the integration of our students and society relate directly to the policy analyses contained in this study, it would seem to be very short sighted to discontinue such a promising endeavor at this time.

This review has been motivated by concerns related for the potential of biases in the conclusions--biases arising either from specific political views or from incomplete analyses. This does not appear to be a major problem. First, the researchers currently involved have established a lengthy record of impartial analysis of important public policies. Second, any results and analyses by them will be subject to intense scrutiny. Third, even further safeguards can be build in by insuring that the data set is made publicly available to other researchers. This sort of check has been used extensively in scientific investigations to insure that the conclusions of analysis are appropriate.

There is no reason to believe that standard scientific checks on any research will be any less effective in this case than they are in general. In fact, because of the sensitive and emotional nature of the topic, this analysis is likely to receive much more extensive and timely attention than most social science analyses. Past history provides numerous examples of this scientific mechanism at work. One relevant case is the "Coleman Report" where the controversial nature of the policy conclusions generated extensive re-analysis and parallel analyses that continues even today. This type of natural reaction serves to protect us from erroneous policy conclusions.

