DOCUMENT RESUME

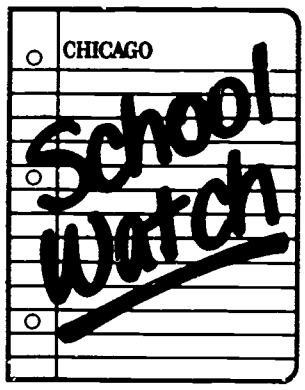
ED 297 421 EA 020 061

TITLE The Bottom Line. Chicago's Failing Schools and How To Save Them. Schoolwatch Research Report No. 1.
INSTITUTION Designs for Change, Chicago, Ill.
PUB DATE Jan 85
NOTE 133p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS *Dropout Rate; *Educational Change; *Grade 9; Longitudinal Studies; Racial Segregation; *Reading Skills; *School Holding Power; Secondary Education; Selective Admission; *Urban Schools
IDENTIFIERS *Illinois (Chicago)

ABSTRACT

Chicago Public Schools, spending more than its $1.5 billion a year budget, has defined its first obligation as producing graduates who can read well. This study assesses how well the school system is succeeding by examining roughly 39,500 students who were ninth graders in fall 1980 and should have graduated in spring 1984. Statistics were used to chart students' progress over 4 years as some dropped out or transferred to other school systems and others graduated with either very good or marginal reading skills. While results graphically depict the system's successes and failures, the study's main priority is using the information to develop improvement plans for Chicago schools. The study investigates (1) the percentage of 1980-81 ninth graders who graduated from high school; (2) the percentage of these students who also could read at average or above average levels; and (3) how the high school completion rate and the percent of well-prepared (reading) graduates differ among Chicago's 62 4-year high schools. The remainder of the report explains research methods, presents results, and explains policy implications and reform recommendations. Compared to a national high school completion rate of 73 percent, Chicago's rate is 47 percent. Whereas the national pecentage for well-prepared graduates is 36 percent, the Chicago rate is 15 percent. These results are shocking. Schools in the majority of Chicago neighborhoods are abject failures or viewed as dumping grounds for uneducable children. A "Quality Schools Agenda" is advised to overcome four key barriers to reforming Chicago's schools. Included are numerous tables and 12 references. (MLH)



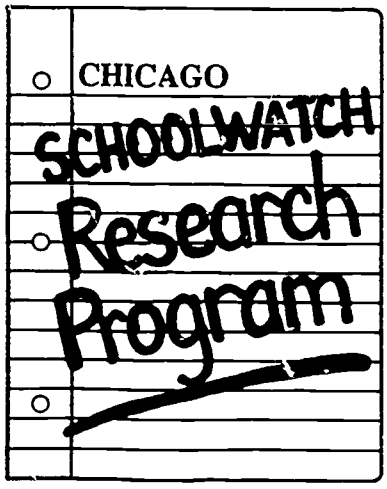
Research
Report No. 1

THE BOTTOM LINE

Chicago's Failing Schools and How to Save Them

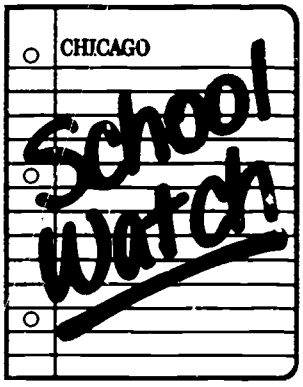
Designs for Change
January 1985

Chicago SCHOOLWATCH is a long-term effort to bring about concrete changes in each Chicago public school, so that the schools will fulfill their first obligation: teaching our children to read. SCHOOLWATCH believes that a critical catalyst for needed reforms in our schools must come from outside the school system -- from informed sustained involvement by business people, citizen groups, journalists, and, most of all, parents in identifying educational problems and pressing for solutions. And while it is important to change system-wide policies, those who want to improve the Chicago school system must focus much of their energy on analysis and action at the school level, where the process of reform most often breaks down.



The SCHOOLWATCH Research Program is a vital part of the SCHOOLWATCH campaign. Because accurate information about the operation and effectiveness of local schools is essential for those who want to improve them, the SCHOCLWATCH Research Program has the following objectives:

- To issue research reports that bring accurate information about the schools to the attention of the public and the school system itself.
- To make reform recommendations that draw on this research analysis, as well as DFC's direct experience in working to improve the Chicago Public Schools.
- To prepare profiles of individual schools for parents and others who are primarily concerned about improving particular schools.
- To press the Chicago Board of Education to put in place systems for gathering and reporting more accurate and useful information about critical educational problems. (The enormous investment that the Chicago Public Schools makes in research, evaluation, and data gathering should yield accurate information and meaningful analyses about such issues as reading achievement, dropout rates, attendance rates, and the like, so that the public and school officials themselves can have confidence that they are getting a true picture of the system's problems and accomplishments.)
- To encourage a broad range of citizens to undertake investigations of key issues facing the Chicago Public Schools. (Designs for Change has provided leadership in a successful effort to convince the Board of Education to adopt detailed freedom of information procedures. DFC will provide advice to anyone who wishes to find out how to obtain information under this policy in an effort to analyze school problems.)



Research
Report No. 1

THE BOTTOM LINE

Chicago's Failing Schools and How to Save Them

Designs for Change
January 1985

For additional copies of this report, contact Designs for Change,
220 South State Street, Suite 1616, Chicago, Illinois 60604,
(312)922-0317.

TABLE OF CONTENTS

LIST OF TABLES

A WORD OF THANKS

The Bottom Line was completed only because of support, cooperation, and advice received from a variety of sources.

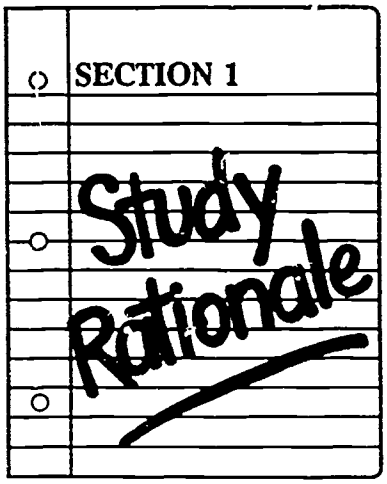
Donald Moore had overall responsibility for the design and implementation of the research plan and for writing the research report. Sharon Weitzman Soltman made a major contribution to study design; coordinated the work of the research team in data collection, analysis, and verification; and aided in preparing the final report. Michele Zimowski aided in computer analysis.

Kathy Blair Yates coordinated the production of the final report. Jean Newcomer assisted in the design and production of the tables and cover. Marilyn Lewis typed and produced the final report.

Suzanne Davenport, Dan Fogel, Jennifer Keller, Paul Charlton, Blythe Olshan, Priscilla Eisaman, and Alfreda Burke helped organize and prepare research data and the report text.

A special thanks to the following individuals who provided advice and reacted to drafts along the way: George Schmidt, Ann Grimes, Marilyn Katz, Fred Hess, Bruce Thomas, and Father Charles Kyle.

The Bottom Line is a report prepared for Chicago SCHOOLWATCH, which receives support from the following foundations: Amoco Foundation, Borg-Warner Foundation, Field Foundation of Illinois, Inc., The Joyce Foundation, John D. and Catherine T. MacArthur Foundation, New Prospect Foundation, The Northern Trust Company, The Albert Pick, Jr. Fund, and W.P. and H.B. White Foundation.



The Chicago Public Schools spends more than $1.5 billion each year. Our school system employs more staff than any unit of government or private corporation in the state of Illinois, except the City of Chicago and the State of Illinois. Ideally, the public expects the schools to develop a broad range of our children's abilities and interests in using this $1.5 billion. However, the first obligation of the school system is to insure that as many students as possible complete twelve years of schooling and that as many of these graduates as possible can read well. If our schools meet these minimal objectives, they create the possibility that our young people can either continue their education or get a good entry-level job. More briefly, the first obligation of the school system is to produce graduates who can read well. To borrow a phrase from business, this is the school system's "bottom line."

In this study, we assessed how well the school system is fulfilling this bottom-line obligation by looking at the roughly 39,500 students who were enrolled in four-year high schools at the ninth grade level in the fall of 1980; these students should have graduated four years later in the spring of 1984, if they had successfully completed a normal four-year high school program. We refer to these 39,500 ninth graders as the Class of 1984; we used statistics about this group of students to chart their path over four years, as some dropped out of school entirely

or transferred to other school systems, some graduated with marginal reading skills, and some graduated with very good reading skills.

These study results provide a graphic picture of the successes and failures of the Chicago Public Schools. However, our major priority is to use this information to develop plans for basic reform that will improve Chicago's schools. The work of Designs for Change focuses primarily on identifying practical solutions to urban school problems and pressing for them to be carried out. We have earned national recognition for our studies of effective urban school reform projects in cities across the country.[1] Based on the results of the present study, on our direct involvement in school reform in Chicago, and on our research about successful school reform in other large cities, we conclude the report with a blueprint for major improvements in the Chicago Public Schools: a Quality Schools Agenda for Chicago.

Key Research Questions

To judge the school system's success with the 39,500 ninth grade students who made up the Class of 1984, we investigated the following questions:

> Question 1. What percentage of the students who were enrolled in ninth grade in 1980-81 ended up graduating from high school ("High School Completion Rate")?
>
> Question 2. What percentage of students who were enrolled in ninth grade in 1980-81 ended up not only graduating from high school but also had the ability to read at or above the level that is considered average across the country ("Percent of Well-Prepared Graduates")?

Notice that the answer to this second question will reflect the school system's success both in keeping students in school and in teaching them to read well. It is essential that an assessment of the system's bottom-line success take both these factors into account, since the reading levels of graduating seniors do not reflect

the reading skills of low-achieving dropouts who leave before the senior year.

The diagram in Table 1 capsulizes the design of the study, as well as presenting some of its basic results for the school system as a whole. As Table 1 indicates, answering the basic research questions cited above will divide the roughly 39,500 students who originally formed the Class of 1984 into three groups:

- Those class members who not only completed high school, but also could read at or above the national average as seniors ("Well-Prepared Graduates").
- Those class members who completed high school, but could not read at or above the national average as seniors ("Other Graduates"). As indicated in Table 1, these Other Graduates include approximately 5,000 students who were reading at or below the eighth grade level, the level designated by the test makers as the Minimum Competency Level.
- Those class members who failed to complete high school within the Chicago Public Schools ("Non-Completers"). As indicated in Table 1, we estimate that there were about 18,000 students among the Non-Completers who dropped out of school entirely and 3,000 who transferred to other school systems.

Those students labeled "Well-Prepared Graduates" have a reasonable chance to attend a four-year college or to compete for entry level jobs that require solid reading skills. In most suburban school districts, parents expect 60% to 70% of high school students to meet this standard for a "Well-Prepared Graduate," and they would be up in arms if their school system's high school completion rate and reading achievement fell significantly below these expected levels. These suburban graduates are the young people with whom Chicago students must compete for jobs and for admission to post-secondary education. The leadership of the Chicago Public Schools has repeatedly stated that reducing the dropout rate substantially and increasing reading achievement until it reaches the national average are among its top priorities, so this research analysis is a measure of the school system's success in reaching its own priority goals.

A third question was a major focus of concern in our study and is closely related to the two questions discussed above:

> Question 3. How do the High School Completion Rate and the Percent of Well-Prepared Graduates differ among Chicago's 62 four-year high schools?

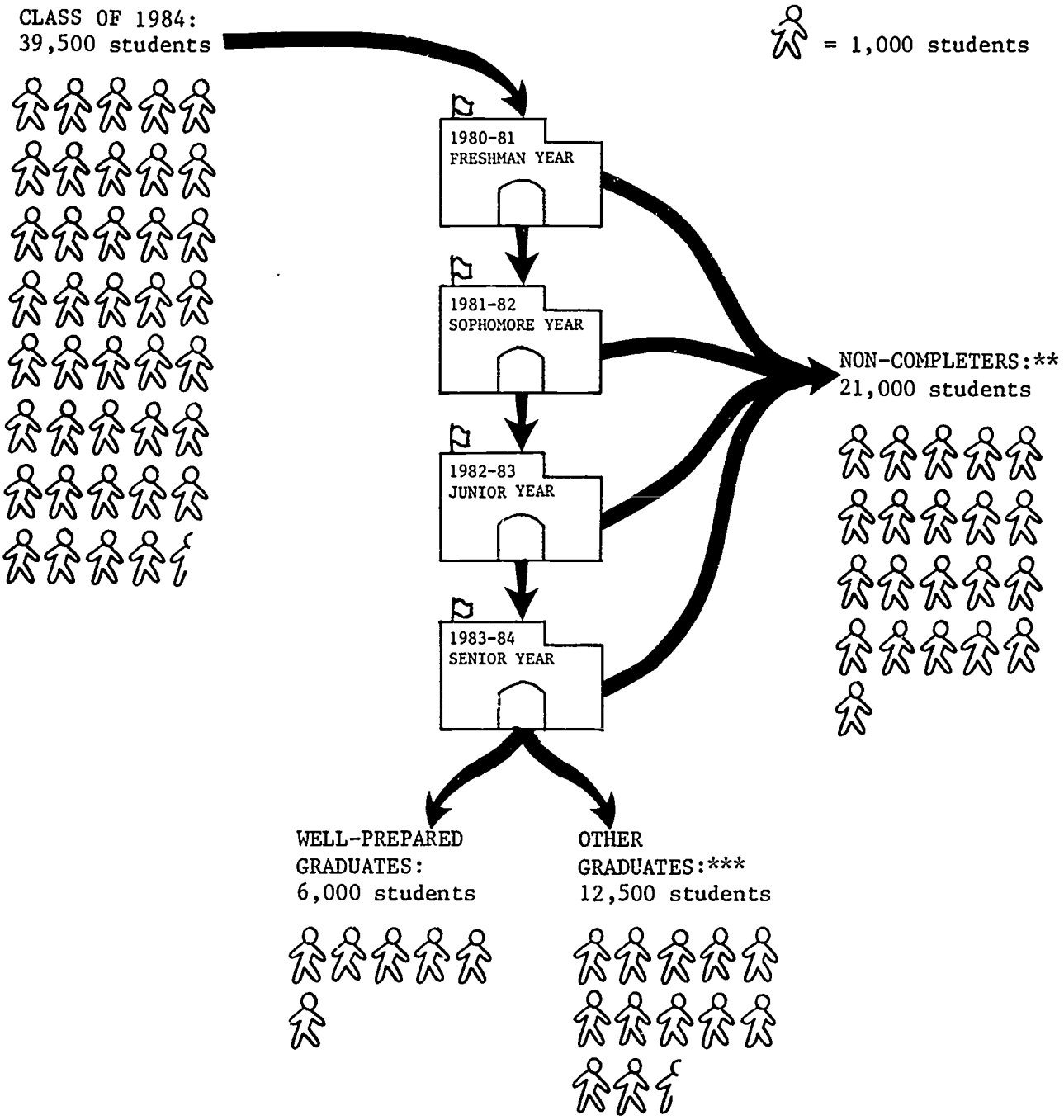
Anyone familiar with the school system knows that there are enormous differences among Chicago's high schools. The study examined how high school completion and reading achievement differed for high schools (1) with different racial compositions and (2) with various kinds of selection criteria for deciding who can attend them.

There are numerous ways to categorize these four-year high schools according to their racial composition and their selectivity. However, comparisons based on the following four categories give a good picture of the differences among types of schools: Selective Academic High Schools (3 schools), Selective Vocational High Schools (5 schools), Non-Selective Integrated High Schools (16 schools), and Non-Selective Segregated High Schools (38 schools). Criteria used in classifying schools into these four categories are explained in Section 2.

In analyzing the Class of 1984, it is useful to note how ninth graders were distributed among these four types of high schools in fall 1980. As Table 2 indicates, 6% of these ninth graders were enrolled in Selective Academic High Schools, 10% in Selective Vocational High Schools, 19% in Non-Selective Integrated High Schools, and 65% in Non-Selective Segregated High Schools. To gain a true picture of the school system's success in keeping students in school and teaching them to read, it is important to pay particular attention to data about the Non-Selective Segregated High Schools that enroll almost two-thirds of the system's students.

Table 1

Class of 1984 --
Approximate Numbers* of Well-Prepared Graduates,
Other Graduates, and Non-Completers[2]



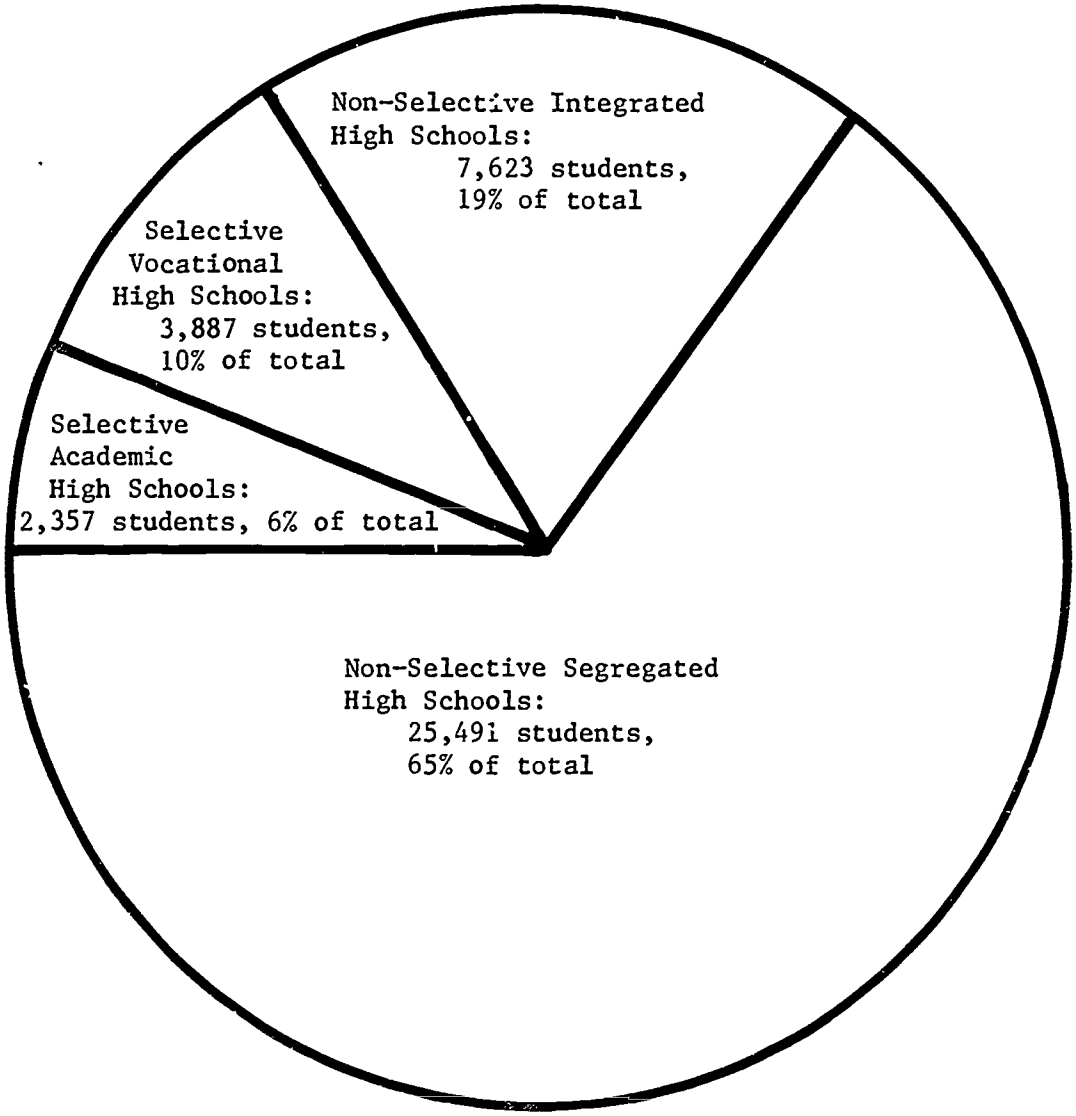
*Rounded to the nearest five hundred.

**Non-Completers include both students who have dropped out of school entirely and students who have transferred to other school systems. For reasons explained in Sections 2 and 3, we estimate that, in the Class of 1984, there were about 18,000 Dropouts and 3,000 Transfers to other school systems.

***As data presented in Section 3 indicate, there were approximately 5,000 students among these 12,500 Other Graduates who were reading at or below the eighth grade level, the level designated by the test makers as the Minimum Competency Level.

Table 2

Class of 1984 --
Ninth Grade Enrollment by Type of High School,
Fall 1980[3]

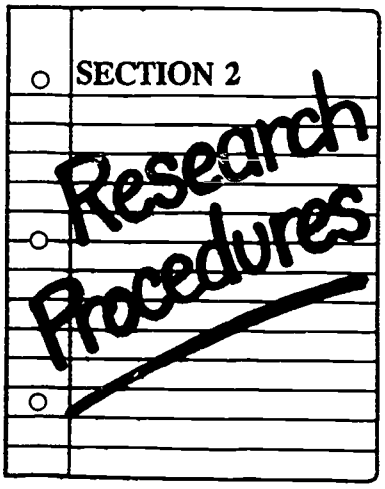


It is also critical to understand data about school completion and reading achievement on a school-by-school basis. It is only when the public becomes involved in analyzing the functioning and effectiveness of specific local schools and pressing for change at the school level that substantial improvements will occur. For this reason, we have presented school-by-school data in this report, and we will make individual school profiles available to the public.

Structure of This Report

In the remainder of this report, we explain the methods used in the research analysis, present research results, and explain resulting reform recommendations.

- Section 2 describes the plan for the research and the specific analyses that were carried out.
- Section 3 describes research results, referring to tables contained in the text, as well as supplementary data tables in Appendix A.
- Section 4 summarizes key research findings that have important policy implications for improving the Chicago Public Schools.
- Section 5 describes a Quality Schools Agenda for Chicago that addresses the problems identified by the research. Section 5 also explains what specific steps can be taken to carry out this agenda by key groups who have a stake in the success of the Chicago Public Schools.



As explained in Section 1, the research team sought to develop a reasonable approach for estimating the "High School Completion Rate" and the "Percent of Well-Prepared Graduates" for the school system as a whole, for four different types of high schools, and for each Chicago high school. We have been careful in conducting the analysis to give the school system the benefit of the doubt and to emphasize any limitations in our results stemming from limitations of the available data.[4]

High School Completion Rate

One reason that various analyses of High School Completion Rates yield conflicting results is that these analyses use differing definitions of key concepts. This study is based on the following definitions of terms, defined here as they were applied in analyzing the High School Completion Rate for the Chicago Public Schools as a whole:

- Graduate: A student who was enrolled in the regular day school program of the Chicago Public Schools and who subsequently graduated from the Chicago Public Schools by attending one of its regular day-school programs.

- Non-Completer: A student who was enrolled in the regular day-school program of the Chicago Public Schools and who failed to graduate from the Chicago Public Schools in a regular day-school program.

- o Dropout: A Non-Completer who left the regular day-school program of the Chicago Public Schools before receiving a high school diploma and who did not enter another public or private day-school program.

- o Transfer Out of the System: A Non-Completer who left the regular day-school program of the Chicago Public Schools before receiving a high school diploma and whose enrollment in another public or private day-school program was verified (for example, through receipt of a request for the student's transcript).

Obviously the percentages of students who fall into these categories is a research issue with major policy implications. A school system should have as high a completion rate as possible. Further, a high dropout rate should obviously be a cause for major concern, but a high rate of transfer out of the system should also be a cause for concern. When students transfer out, they may do so merely because their families move for reasons unrelated to school quality, but they may also do so because they are dissatisfied with the quality of the education they are receiving.

There are three methods that are in wide use for estimating the High School Completion Rate in particular school systems: the "Leave Codes" Method, the Student Tracking Method, and the Enrollment Data Method. Each is described briefly below in explaining the procedures used in this study for analyzing High School Completion Rates.

When the "Leave Codes" Method is used, the school system fills out a form whenever a student withdraws from school, indicating the reason for the student's withdrawal. Historically, Chicago has employed a highly inaccurate version of the "Leave Codes" Method in estimating Chicago's dropout rate.[5] When a student leaves school in Chicago, the departing student, sometimes with assistance from a staff member, fills out a form indicating the reason for the student's withdrawal from school.[6] The form lists numerous reasons for withdrawal from school, only one of which is "dropout." These reasons include, for example,

"entered verified employment," "needed at home," "enlisted," "can't adjust," "miscellaneous leave for involuntary reasons (including pregnancy)," and "lost -- not coming to school -- truant officer cannot locate." Many of the stated reasons for leaving school, even if accurate, should put the student in the dropout category, given a reasonable definition of the term. Yet historically, various Board of Education departments have considered different combinations of "leave codes" in calculating the dropout rate. Some have only counted data for students checked off as "dropouts" on the form, while others have included additional categories (for example, "can't adjust") in calculating the dropout rate.[7]

Several additional categories on the student withdrawal form can be used to indicate that the student has transferred to another school or school system. The student's stated reason for leaving is not verified through follow-up investigation. For example, no follow-up is made to determine whether students who say they are transferring to another school system actually enroll there, and there is substantial evidence that many students who claim to be transferring out of the system actually drop out.[8]

Thus, the current method for determining High School Completion Rates in Chicago is based on thousands of subjective judgments about individual students that are frequently influenced by school personnel who have a stake in minimizing the dropout rate.

Two more satisfactory alternatives for estimating the High School Completion Rate are used in other cities and states: the Student Tracking Method and the Enrollment Data Method.

When the Student Tracking Method is used, each student entering the school system is assigned a unique number, which the student retains throughout his/her school career.[9] The High School Completion Rate is

then simply the percentage of the entrants in a given class who eventually graduate from high school in the school system. And the Dropout Rate is the percentage of entrants who fail to complete high school, adjusted for those students whose transfer to a regular day-school program in another school system is verified.

The great advantage of calculating the completion rate using the Student Tracking Method is that there is very little subjectivity involved. Once a student is enrolled and is assigned a number, that student is considered a dropout unless the student graduates or is a verified transfer.

Please note that our discussion of the Student Tracking Method focuses on its use in estimating the dropout rate from ninth to twelfth grade. However, there is evidence of a substantial dropout rate among younger students in urban school systems, particularly at the transition point when they enter high school.[10] The Student Tracking Method can be used to chart patterns of dropout among these students as well.

A further advantage of using the Student Tracking Method is that it can yield an enormous amount of useful information for those interested in analyzing the specifics of the dropout problem in order to remedy it. Among the questions that such an approach can illuminate are the following: At what point in their school careers are students dropping out? To what extent do students transfer between Chicago public high schools and what kind of high schools do they transfer out of and into? To what extent are students with low reading scores more likely to drop out? To what extent are students who are held back more likely to drop out?

Since each student enrolled in the Chicago Public Schools has a unique computer number, the school system currently has the capability

to analyze the dropout problem and the High School Completion Rate using the Student Tracking Method, by doing straight-forward analyses of existing computerized student data. However, the school system's administrators have not to date conducted such an analysis and made it public. Late in 1984, the school system did, however, agree to conduct a joint study of the dropout problem using the Student Tracking Method in cooperation with the Chicago Panel on Public School Finances.[11]

A second widely used method for estimating the High School Completion Rate has been employed in the present study: the Enrollment Data Method. The Enrollment Data Method employs publicly available enrollment data by grade level over a period of years.[12] In the present study, we analyzed ninth, tenth, eleventh, and twelfth grade data for each four-year high school for the five graduating classes that should have completed high school in 1980, 1981, 1982, 1983, and 1984.

Because official enrollment data for ninth graders do not distinguish between students who have entered ninth grade from eighth grade and students who have been retained in ninth grade from the previous year, the class groups that we analyzed included both types of students. Further, because some special education and other special students are not included in particular high school grade categories in the enrollment data, we adjusted enrollment figures to include them.[13]

Using the Enrollment Data Method, the High School Completion Rate for a given graduating class is calculated as follows:

$$\frac{\text{Number Enrolled in a Class in the Spring of Their Twelfth Grade Year}}{\text{Number Enrolled in a Class in the Fall of Their Ninth Grade Year}} = \text{High School Completion Rate for That Class}$$

Thus, for example, the High School Completion Rate for Chicago's Class of 1984 was calculated as follows:

$$\frac{\text{18,302 Students Enrolled in Spring of Twelfth Grade Year}}{\text{39,358 Students Enrolled in Fall of Ninth Grade Year}} = \text{47\% Completion Rate}$$

For reasons discussed in the accompanying footnote, spring enrollment in twelfth grade was judged to be the most appropriate available statistic for estimating the number of high school graduates.[14]

A major advantage of this method is that it employs data that are the basis for reimbursement to school districts and are thus reasonably reliable, unlike data employed in the school system's present subjective system for estimating the dropout rate.

Because the Enrollment Data Method does not track individual students, but instead relies on overall enrollment figures, results obtained using the Enrollment Data Method should be regarded as estimates of the results that would be obtained using the Student Tracking Method. Below, we discuss a series of issues concerning differences in the results that might occur using the Enrollment Data Method and the Student Tracking Method:

- o Issue 1. When the Enrollment Data Method is used, students who take more than four years to complete high school will not be counted as graduates of their original ninth grade class, even though they ultimately graduate. However, students from earlier classes who take more than four years to graduate will be counted in the graduation totals for the class being studied, and late graduates from successive classes will tend to balance each other out. Thus, the Enrollment Data Method still gives an estimate of the High School Completion Rate close to that yielded by the Student Tracking Method.[15]

- o Issue 2. Standard enrollment totals for ninth grade students include students retained from the previous year (holdbacks), as well as students who have newly entered ninth grade from eighth grade. Thus, the ninth grade enrollment total used for estimating the completion rate with the Enrollment Data Method will be larger than the ninth grade enrollment total used with the Student Tracking Method, if the Student Tracking Method focuses only on students who have newly entered high school. However,

in many cases, this difference is offset, and the two methods yield nearly the same rates. When enrollment data are used in calculating the Completion Rate, the relevant twelfth grade enrollment for a particular class includes students who were held back in ninth grade but then made normal progress toward a high school diploma (graduating in a total of five years). If the Completion Rate for holdbacks who graduated in five years is close to the Completion Rate for non-holdbacks who graduated in four years, then the two methods yield close to the same result. Even if the Completion Rates for ninth grade holdbacks and non-holdbacks differ, the two methods yield close to the same result if the number of holdbacks involved is small. However, if the number of ninth grade holdbacks is large and their Completion Rate is substantially lower than the Completion Rate for non-holdbacks, then the Enrollment Data Method can yield a significantly lower Completion Rate than the Student Tracking Method. This situation does in fact occur in some Chicago high schools, although its impact on results for the system overall and for types of high schools is minimal. To account for this problem in those individual high schools where it occurs, various qualifications about results have been made (see Section 3).

- Issue 3. When types of high schools and individual high schools are analyzed, the Student Tracking Method can yield precise evidence about student transfers from school to school inside the school system, and this information can be used in calculating Completion Rates. In instances where "transfers out" of a particular school high or type of high school are offset by "transfers into" a particular high school or type of high school, the Enrollment Data Method will yield Completion Rates very close to the rates yielded by the Student Tracking Method. As explained in Section 3, findings have been qualified to take into account the possibility that "transfers out" may, in some instances, exceed "transfers in."

- Issue 4. The Enrollment Data Method cannot be used to distinguish between dropouts and those who are verified transfers to another school system. For this reason, we have consistently acknowledged that those who fail to graduate from the Chicago Public Schools are Non-Completers who could be either dropouts or transfers out of the system. We have used fragmentary information available from other research studies to estimate that about 8% of Chicago's ninth grade enrollment in a particular high school class eventually transfer to another school system.[16] If the Student Tracking Method is used, and a valid procedure is employed for verifying that students who claim to be transfering out of the system actually enroll in a regular high school day program elsewhere, such an analysis can yield more precise estimates of the numbers of transfers out of the system and distinguish transfers out of the system from dropouts.

An overriding question one must consider in using the Enrollment Data Method is whether one is trying to get an estimate of the range in

which the High School Completion Rate falls or whether one is seeking an answer that is accurate to a specific percentage point. The national High School Completion Rate, when calculated using the Enrollment Data Method, is 73% according to the most recent national data.[17] If the Completion Rate for a school system, a particular type of school, or an individual school is far below that figure, then there is significant cause for concern. For example, applying the Enrollment Data Method to Chicago's Non-Selective Segregated High Schools indicates that their Completion Rate for the past five graduating classes has ranged between 36% and 39%. Thus, it is possible to state with considerable confidence that the High School Completion Rate for these schools is only about half the national average, although the true rate may be a few percentage points higher or lower than the calculation for an individual year indicates.

Weighing available evidence from our own analysis and from other studies, we conclude that the Enrollment Data Method is an appropriate method for estimating the High School Completion Rate, that results based on this method will usually not differ substantially from results yielded by the Student Tracking Method, and that circumstances in which results generated by the two methods might differ can be anticipated, so that appropriate caution can be used in interpreting these results.

Percent of Well-Prepared Graduates

The first piece of information needed to estimate the Percent of Well-Prepared Graduates is the number of high school seniors who are reading at or above the national average. Information used in making this calculation was obtained through a freedom of information request to the school system concerning scores of high school students on the Tests of Achievement and Proficiency (TAP Tests). Different

parts of the TAP Tests focus on Reading Comprehension, Mathematics, Written Expression, Using Sources of Information, Social Studies, and Science. The TAP Tests are administered each fall in grades nine through twelve. Designs for Change obtained data about the numbers of students who achieved each possible score on the TAP Tests in Reading Comprehension and Mathematics for every high school and for each of the four high school grade levels in fall 1983.[18]

Based on these data, we calculated the percent of students tested who were reading at or above the national average. Since fewer than 100% of the students enrolled in each high school are actually tested, we assumed that the group of students not tested included the same percentage of students able to read at or above the national average as the group who were in fact tested. If anything, this assumption overestimates the number of students in a given school actually reading at or above the national average, since students who don't take the tests typically are lower achievers than those who do.[19]

Using these data about the number of seniors reading at or above the national average, we then calculated the Percent of Well-Prepared Graduates as follows:

$$\frac{\text{Number in a Class Reading At or Above the National Average in the Spring of Their Twelfth Grade Year}}{\text{Number Enrolled in a Class in the Fall of Their Ninth Grade Year}} = \text{Percent of Well-Prepared Graduates for That Class}$$

Thus, for example, the Percent of Well-Prepared Graduates for the Class of 1984 was calculated as follows:

$$\frac{\text{6,078 Students Reading At or Above the National Average in the Spring of Twelfth Grade Year}}{\text{39,358 Students Enrolled in Fall of Ninth Grade Year}} = \text{15\% Well-Prepared Graduates}$$

As discussed in the previous section, the Percent of Well-Prepared Graduates is a useful "bottom-line" standard for judging the effectiveness of the school system, because it takes into account both the percentage of students completing high school and the reading levels of those students completing high school. This statistic addresses the question: What percent of the students who were enrolled in the ninth grade in 1980-81 both graduated from high school and had the ability to read at or above the national average?

One other analysis of the reading scores of seniors in the Class of 1984 was completed. In this analysis, we identified the number of seniors that the test makers predict will definitely finish high school reading below the "Minimum Competency Level.' As defined by the test makers, Minimum Competency Level is the minimum level at which students can "function effectively in both school and society."[20] Seniors who score below this Minimum Competency Level when they graduate are reading more than four years below grade level. In a society where most jobs with a future will require the ability to read well, these students have almost no chance to get a good job. In Section 3, we present data about the numbers and percentages of seniors in the Class of 1984 who definitely will finish high school reading below the Minimum Competency Level.

Costs of Producing a Well-Prepared Graduate

A common approach to evaluating education and training programs

is to ask how much money is being expended in the program for each satisfactory result produced.[21] For example, the "bottom line" for job training and placement programs is often defined as the success of the program in placing enrollees in a job, and the program's cost-effectiveness is assessed in part by asking how much money was expended in the program for each person successfully placed.

We have asked the same question concerning the costs for each Well-Prepared Graduate in the Class of 1984. Using available cost data for individual high schools, we estimated the total amount that was spent on the Class of 1984 over a four-year period.[22] The Cost Per Well-Prepared Graduate was then calculated as follows:

$$\frac{\text{Total Amount Expended on the Class of 1984 Over a Four-Year Period (\$354,411,000)}}{\text{Number of Well-Prepared Graduates in the Class of 1984 (6,078)}} = \text{Cost Per Well-Prepared Graduate for the Class of 1984 (\$58,000)}$$

This cost data analysis can be highly informative, but the data must be interpreted carefully. It should cost more to educate urban students in a city like Chicago, so it should not be surprising if Chicago's Cost Per Well-Prepared Graduate exceeds the national average of $31,000 for a four-year high school education. Further, a selective high school like Lane Tech begins with students who have high academic skills and are more motivated, so its cost-effectiveness can look good because its students come into the school already reading well and not necessarily because of the school's educational program. Further, a school that is non-selective and operates in a low-income neighborhood can be expected to spend more money for each Well-Prepared Graduate it produces, because the task it faces is much more difficult.

Bearing these factors in mind, it is still a useful indicator of the effectiveness of individual Chicago schools and of various types of high schools to examine their Cost Per Well-Prepared Graduate and to see whether they fall within a reasonable range, when compared with the national average cost for producing a Well-Prepared Graduate. If the school system's graduation rates and reading achievement levels were close to the national average, the system's Cost Per Well-Prepared Graduate would also be close to national norms.

Analysis of Ninth Grade Reading Scores for the Class of 1987

When obtaining reading score data for those students in the Class of 1984 who were still enrolled in their senior year (based on testing done in fall 1983), we also obtained data concerning the reading scores of students who were ninth graders in fall 1983 and comprise the Class of 1987.

An analysis of these data is useful as an indicator of whether we can expect the Class of 1987 to have a better record of reading achievement than the Class of 1984 and an indicator of how well students are achieving in the elementary schools.

Two indicators of reading achievement for ninth graders in the Class of 1987 were analyzed. First, the research team calculated the percentage of these ninth graders who were reading at or above the national average. Second, we calculated the percentage of ninth graders whom the test makers predict will definitely finish high school reading below the minimum competency level, even if they stay enrolled for four years.[23] These are the same analyses that were carried out on the reading achievement data for seniors in the Class of 1984. (It would have been ideal to compare data about members of the Class of 1984 when

they were in ninth grade with data about these ninth graders in the Class of 1987. Unfortunately detailed data concerning ninth grader achievement for the Class of 1984 were not available to us.)[24]

Variations Among Types of Schools

As noted in the previous section, we wanted to determine how the High School Completion Rate, the Percent of Well-Prepared Graduates, and other indicators of the school system's effectiveness varied for schools with differing racial compositions and with differing selection criteria for admitting students.

Chicago's high schools vary in the percentage of whites, blacks, Hispanics, and other minorities who attend them. In the Chicago school desegregation case, the school system has agreed to definitions of "racially isolated" (segregated) and integrated schools. Applying these definitions, we called an individual school "segregated" if its enrollment was more than 70% minority, and we called a school "integrated" if its enrollment was 70% or less minority.[25]

Chicago's high schools also differ according to whether students must meet substantial admissions criteria to attend a particular high school or whether students can attend a high school if they have graduated from eighth grade and live within the school's attendance zone. Admissions criteria can include the student's achievement scores, attendance record, and behavior record. Some high schools have admissions criteria that eliminate many Chicago students from eligibility, and these include three selective academic high schools and five selective vocational high schools. The admissions requirements for these high schools were verified through telephone interviews with school administrators and counselors.[26]

The other 54 four-year high schools do not have substantial across-the-board admissions criteria, although they may have some more modest admissions criteria or they may have selective programs housed within them that have strict admissions standards.[27]

To gain an insight into the impact of both racial composition and selectivity, we divided the high schools into four types, as follows:

- o Selective Academic High Schools: These three schools have admissions criteria that eliminate most Chicago public school students. They are intended for the most academically able students who intend to enter a four-year college.[28]

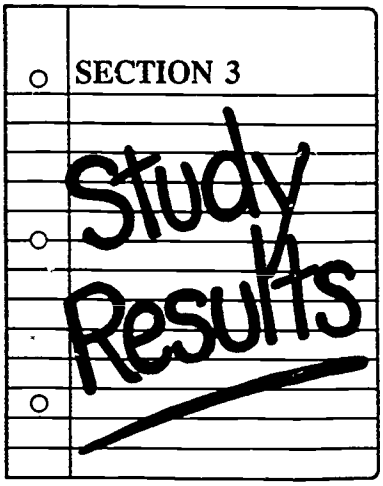
- o Selective Vocational High Schools: These five schools have admissions criteria that eliminate many Chicago public school students, although they set lower standards than those used by the Selective Academic High Schools. They are intended for students who wish to prepare for the vocational specialties that the schools offer, as well as students who plan to pursue post-secondary education.[29]

- o Non-Selective Integrated High Schools: These 16 schools have historically been neighborhood high schools with no selection criteria, although many of them now include special programs with selective admissions criteria. Using the school system's definition of "integrated," these schools are at least 30% white.[30]

- o Non-Selective Segregated High Schools: These 38 schools have historically been neighborhood schools with no selection criteria, or vocational or other special schools with minimal selection criteria. Some of these schools have recently established special programs with selective admissions criteria. Using the school system's definition of "racially isolated," they are more than 70% minority.[31]

Table A-9 presents data about the racial composition of each high school in fall 1983 that were used in making these distinctions and indicates how each individual high school was classified.

In the next section, which describes basic findings of the study, results are frequently presented for each of these four types of schools.



High School Completion Rates

The Enrollment Data Method for estimating the High School Completion Rate for the Class of 1984 has been employed in this analysis, as described in Section 2.

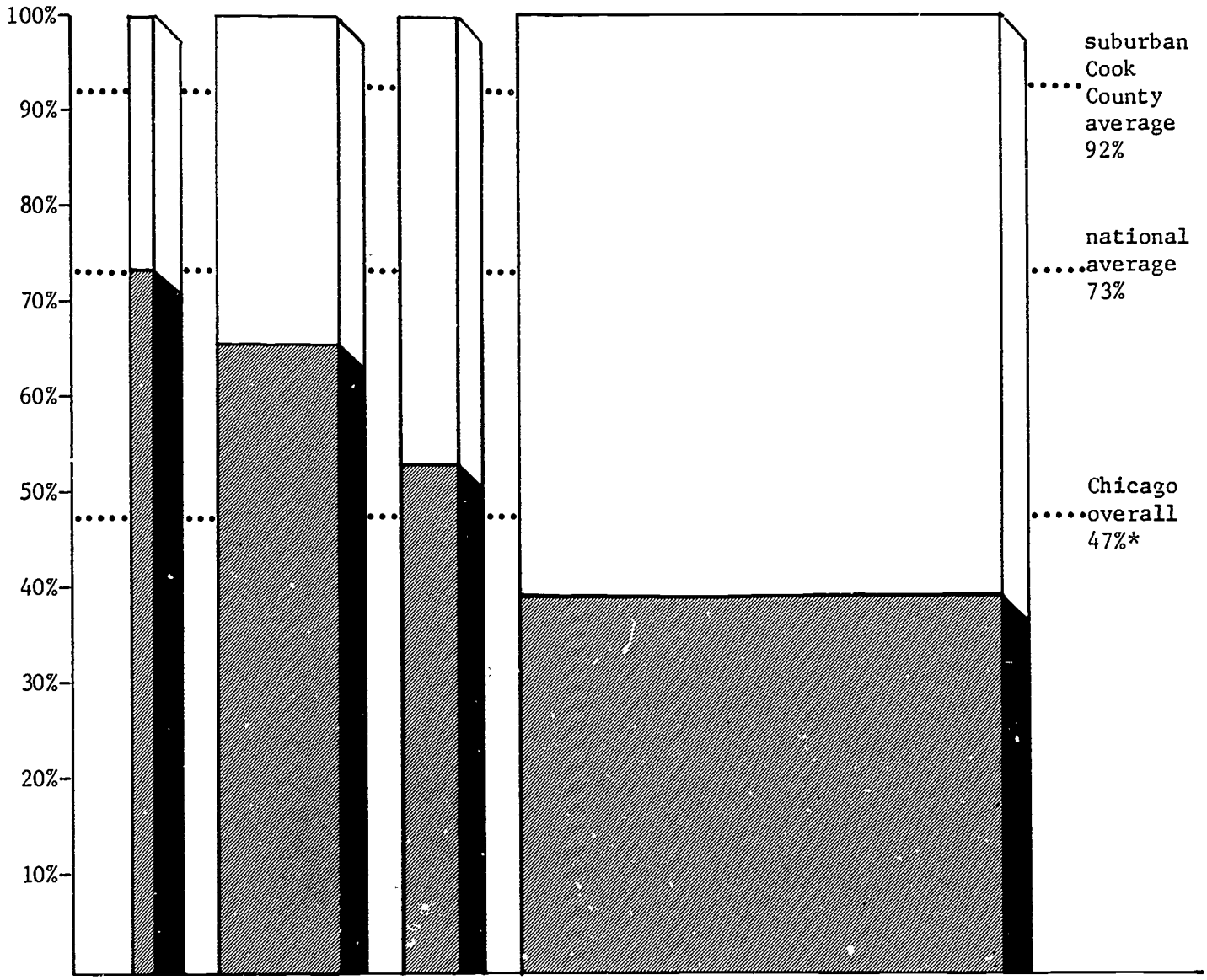
Table 3 indicates the High School Completion Rate for Chicago high schools overall. Overall, the Class of 1984 had a 47% completion rate. That is, an estimated 47% of students who were enrolled in ninth grade in fall 1980 ended up graduating, while 53% were Non-Completers. Based on a rough estimate that about 8% of the Class of 1984 actually transferred out of the Chicago Public Schools into another school system, approximately 45% of the Class of 1984 overall were dropouts.[32]

Table 3 also indicates the High School Completion Rates for the four different types of high schools described in Section 2. In Selective Academic High Schools, an estimated 73% of students who enrolled as ninth graders remained to graduate within the Chicago Public Schools. The comparable figures were 65% for Non-Selective Integrated High Schools, 52% for Selective Vocational High Schools, and 38% for Non-Selective Segregated High Schools.

These results for different types of high schools can be compared cautiously with a 73% completion rate for the nation as a whole and a 92% completion rate for suburban Cook County. Chicago's Selective

Table 3

Class of 1984 --
High School Completion Rates,
Chicago High Schools Overall and
Four Types of High Schools[33]



Selective Academic High Schs.	Non-Selective Integrated High Schools	Selective Vocational High Schs.	Non-Selective Segregated High Schools
1,722 graduates of 2,357 orig'ly enrolled (73%)	4,941 graduates of 7,623 originally enrolled (65%)	2,015 graduates of 3,887 originally enrolled (52%)	9,624 graduates of 25,491 originally enrolled (38%)

*18,302 graduates of 39,358 originally enrolled

Academic High Schools equal this national average but fall well below the suburban Cook County average. Since Chicago's Selective Academic High Schools have the ability to choose the very best achievers from among Chicago Public School students (the top 10% or better), these selective high schools should have completion rates similar to those of suburban high schools. Further investigation using the Student Tracking Method is needed to determine what portion of the approximately 27% of non-completers in Selective Academic high schools are dropouts, what percent are transfers either inside or outside the school system, and what the reasons are for students to transfer from or drop out of these selective schools.

The 65% completion rate for Non-Selective Integrated High Schools should be compared cautiously with the national completion rate of 73%. Based on data about individual schools in this category, there appears to be significant transferring into and out of these Non-Selective Integrated Schools. Use of the Student Tracking Method is necessary to determine more definitively how the completion rates in these schools compare with the national average.

The 52% completion rate for Selective Vocational High Schools is far below the national average. Further analysis using the Student Tracking Method is needed to determine why the completion rate in these high schools is so low, given that they can exercise substantial selectivity in choosing their students.

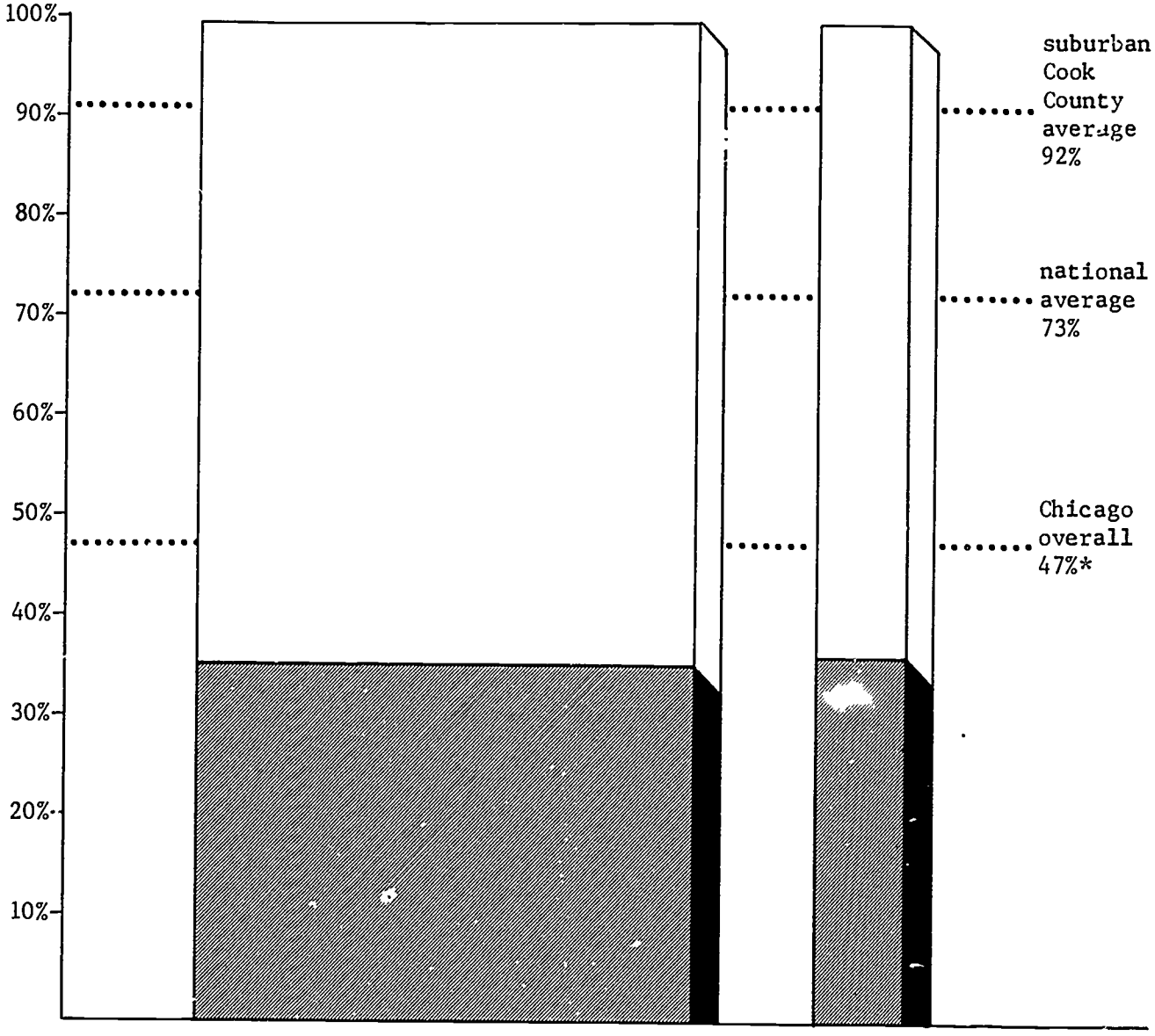
The 38% completion rate for Non-Selective Segregated High Schools is roughly half the national average. Because these high schools enroll almost two-thirds of Chicago's entering ninth graders, these data point to a severe problem that lies at the heart of the educational program of the Chicago Public Schools.

A recent study of the dropout rate in two predominantly Hispanic high schools and concerns expressed about the Hispanic dropout rate by Hispanic leaders have focused attention on the extent of the Hispanic dropout problem.[34] Thus, it was of interest to determine how the High School Completion Rate in Chicago's four predominantly Hispanic non-selective high schools compared with the completion rate in Chicago's 27 predominantly black non-selective high schools. Table 4 provides data about the High School Completion Rate for the Class of 1984 in these two categories of schools. (There are also seven non-selective Chicago high schools in which more than 70% of students are minority students, but no one minority group comprises more than 70% of the students; these schools were not included in this analysis.) As Table 4 indicates, the High School Completion Rate in predominantly black and predominantly Hispanic high schools was almost identical for the Class of 1984. Hispanic high schools had a 36% completion rate and a 64% non-completion rate. Predominantly black high schools had a 35% completion rate and a 65% non-completion rate.

Although most of the attention in this study is focused on the Class of 1984, we also calculated High School Completion Rates for the five most recent graduating classes: 1980, 1981, 1982, 1983, and 1984 (see Table 5). For the school system as a whole, the High School Completion Rate during this period has stayed almost constant, vacillating between 46% and 47%. The completion rate for Non-Selective Segregated High Schools also has remained in a narrow range from 36% to 39%. Selective Academic High Schools have remained in the range from 69% to 74%. Non-Selective Integrated High Schools have ranged from 60% to 65%, and the completion rate in these schools has recently been rising slightly. It is unclear to what extent this rise reflects an increase

Table 4

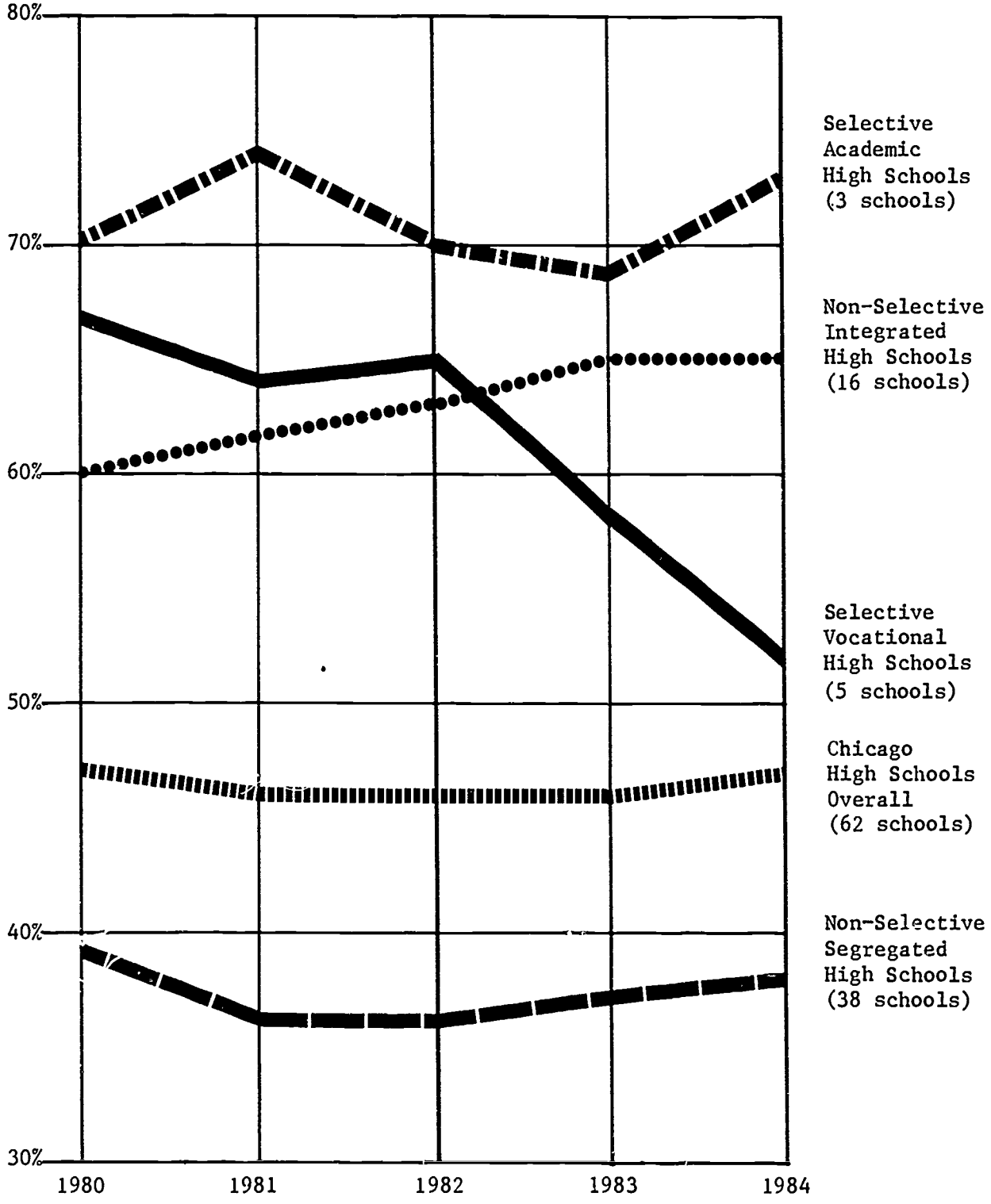
Class of 1984 --
High School Completion Rates
for Predominantly Black and Predominantly Hispanic
Non-Selective High Schools[35]



*18,302 graduates of 39,358 originally enrolled

Table 5

Classes of 1980, 1981, 1982, 1983, and 1984 --
High School Completion Rates,
Chicago High Schools Overall and
Four Types of High Schools[36]



in the ability of these schools to hold their students in school and to what extent it reflects an influx of transfer students who begin high school in other types of schools. In contrast, the completion rate for Selective Vocational High Schools has fallen substantially, from a high of 67% for the Class of 1980 to 52% for the Class of 1984. It is unclear what has caused this decline, and this issue needs further analysis.

Table 6 divides all four-year high schools into four categories, according to their High School Completion Rates for the Class of 1984.[37] Schools in the top category (70% or more) ranked above or very near the national average of 73%. Schools in the other three categories all ranked below the national average, with completion rates of 50% to 69%, 30% to 59%, and less than 30%. Table 6 also separates schools according to the four types employed in the research study: Non-Selective Segregated, Selective Vocational, Non-Selective Integrated, and Selective Academic. Data about individual high schools is helpful in further clarifying the relative standing of these four types of schools.

As explained in Section 2, the research team was consistently aware that the High School Completion Rate for an individual school is an estimate, indicating the range in which the school's true completion rate falls. It is for this reason that Table 6 places schools in categories rather than presenting a single percentage estimate for the completion rate at an individual school. Further, after placing a school in its appropriate category based on the data for the Class of 1984, the research team examined additional data about each high school's completion rate to see whether there was some evidence that its true completion rate might possibly fall into the next higher category than the one in which it had been placed. In this way schools were

Table 6

Class of 1984 --
High School Completion Rates,
School-by-School[38]

HIGH SCHOOL COMPLETION RATE	SCHOOL TYPE			
	NON-SELECTIVE SEGREGATED HIGH SCHOOLS	SELECTIVE VOCATIONAL HIGH SCHOOLS	NON-SELECTIVE INTEGRATED HIGH SCHOOLS	SELECTIVE ACADEMIC HIGH SCHOOLS
70% OR MORE	Metro		Bogan Taft Mather Curie Washington Von Steuben	Young Lane
69% TO 50%	Morgan Park Kelvyn Park Kenwood Farragut Senn Juarez Tilden Harlan Harper	Prosser Westinghouse Chicago Voc.	Steinmetz Hubbard* Kelly Amundsen Gage Park Foreman Roosevelt Kennedy	Lindblom
49% TO 30%	Julian* Near No.* Corliss Englewood Richards Hyde Park Lake View Robeson Wells Collins Fenger Bowen Sullivan* Calumet Manley Crane King	Simeon* Dunbar**	Schurz* Lincoln Park	
LESS THAN 30%	Carver* Orr* Clemente* Phillips* DuSable* Cregier* Marshall* Hirsch** Flower* So. Shore* Austin			

*The research team examined data about each high school's completion rate for the prior three graduating classes, taking into account a completion rate calculated using senior spring enrollment and a completion rate using the school's reported number of graduates. The research team also examined ninth and tenth grade enrollments over this period to identify schools which seemed to be holding back large numbers of ninth graders. In the case of this particular school, the data indicated that the typical completion rate might be one category higher than the 1984 data indicated.

**Data from the prior three years indicated a wide range of completion rates. Thus the data for 1984 and prior years may be unreliable.

identified (1) that had had a significantly higher completion rate in one of the past three years or (2) that appeared to be holding back large numbers of ninth graders. As explained in Section 2, this latter practice can distort a school's completion rate when the Enrollment Data Method is used. If any of these data suggested that the school's typical completion rate might be one category higher than the one in which it had been placed, we identified this school with an asterisk (*). Altogether, fifteen schools received an asterisk, including nine schools whose completion rates had fallen into the "Less than 30%" category. These lowest ranking schools were particularly likely to hold back large numbers of students in ninth grade and thus it was possible that if the Student Tracking Method had been used, their completion rates might exceed 30% somewhat.

If data from previous years indicated a wide range of results and thus the data appeared unreliable, we placed two asterisks by a school's name. Two schools were identified in this way.

Based on the analysis of school-by-school completion rates, 9 Chicago high schools were above or very near the national average, and 51 were significantly below it (see Table 6). Thirty-two high schools had a completion rate of less than 50%. Of these 32 low-ranking schools, 28 were Non-Selective Segregated High Schools.

Level of Reading Achievement and Percent of Well-Prepared Graduates

As explained in Section 2, a second major emphasis of the research study was to estimate the Percent of Well-Prepared Graduates for the Class of 1984. Percent of Well-Prepared Graduates takes into account both the reading achievement of graduating seniors and the completion rate for their high school class.

Reading Achievement of High School Seniors

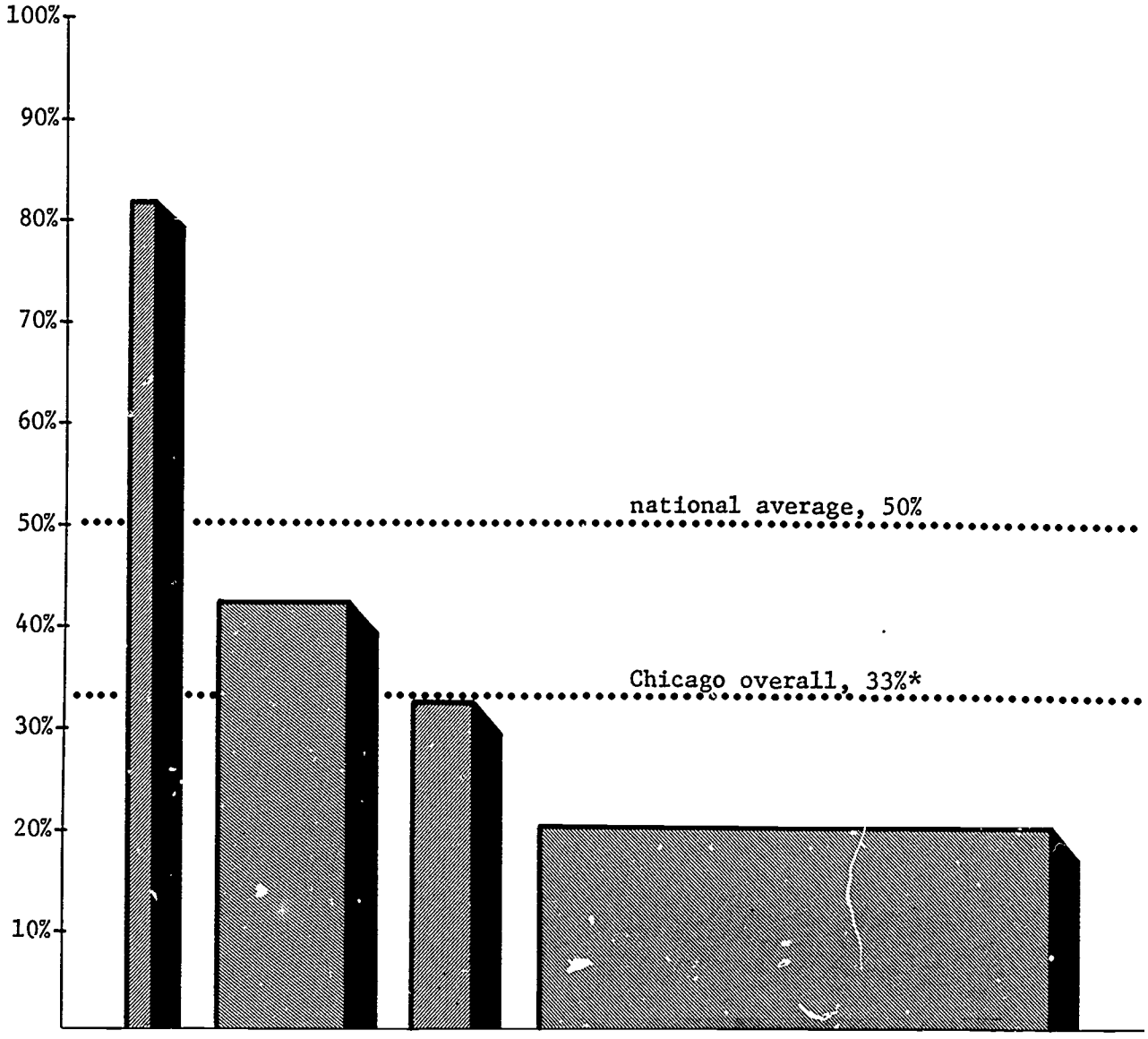
An important component of the analysis of the Percent of Well-Prepared Graduates was to examine the reading achievement levels of high school seniors in the Class of 1984. Table 7 indicates the number and percent of seniors in the Class of 1984 reading at or above the national average, based on tests taken in the fall of their senior year. Table 7 presents both the percentage of seniors reading at or above the national average for all Chicago high schools and the percent reading at or above the national average for each of the four types of high schools. For the school system as a whole, 33% of seniors were reading at or above the national average, as compared with 50% nationally.

For Selective Academic High Schools, 82% of seniors read at or above the national average, as compared with 50% nationally. In the other three types of high schools, the percentage is well below the national average and stands at 42% for Non-Selective Integrated High Schools, 32% for Selective Vocational High Schools, and 20% for Non-Selective Segregated High Schools. A review of the actual numbers of seniors reading at or above the national level further illuminates the substantial differences among the four types of high schools. For example, Table 7 indicates that the 3 Selective Academic High Schools produced 1,419 seniors reading at or above the national average, while the 38 Non-Selective Segregated High Schools produced only 1,929 seniors reading at or above the national average.[39]

Table 8 presents the number and percent of seniors reading at or above the national average on a school-by-school basis.[40] Seven four-year high schools exceed the national average in this regard, while 55 fall below it. In the twelve lowest-ranking high schools, fewer than 10% of seniors read at or above the national average.

Table 7

Class of 1984 --
Percent of Seniors Reading At or Above
the National Average,
Chicago High Schools Overall and
Four Types of High Schools[41]



Selective Academic High Schs.	Non-Selective Integrated High Schools	Selective Vocational High Schs.	Non-Selective Segregated High Schools
1,419 of 1,722 seniors at or above national average (82%)	2,095 of 4,941 seniors at or above national average (42%)	635 of 2,015 seniors at or above national average (32%)	1,929 of 9,624 seniors at or above national average (20%)

*6,078 of 18,302 seniors at or above the national average (33%)

Table 8

Class of 1984 --
Percent of Seniors Reading
At or Above the National Average,
School-by-School[42]

% READING AT OR ABOVE NAT'L AVERAGE	SCHOOL TYPE			
	NON-SELECTIVE SEGREGATED HIGH SCHOOLS	SELECTIVE VOCATIONAL HIGH SCHOOLS	NON-SELECTIVE INTEGRATED HIGH SCHOOLS	SELECTIVE ACADEMIC HIGH SCHOOLS
75% OR MORE				Lane-92%
74% TO 50%	Kenwood-66%		Mather-67% Bogan-54% Kennedy-51%	Young-74% Lindblom-71%
49% TO 25%	Metro-42% Morgan Park-40% Hyde Park-34% Juarez-28% Sullivan-26% Corliss-25%	Prosser-44% Dunbar-37% Chicago Voc.-32%	Taft-49% Hubbard-47% Washington-44% Lincoln Park-42% Foreman-41% Steinmetz-41% Curie-40% Kelly-38% Von Steuben-36% Roosevelt-34% Schurz-30% Gage Park-28% Amundsen-28%	
LESS THAN 25%	Julian-23% Fenger-22% Lake View-22% Harlan-21% Kelvyn Pk-21% Bowen-21% Senn-20% So. Shore-19% Robeson-18% Carver-18% Near North-16% Calumet-16% Hirsch-15% Clemente-13% King-12% Collins-12% Englewood-11% Phillips-11% Tilden-10% Farragut-9% Austin-9% Wells-8% Cregier-7% Marshall-7% Orr-7% Harper-7% Crane-7% DuSable-6% Richards-5% Manley-5% Flower-4%	Westinghouse-23% Simeon-22%		

Data about individual schools also underscore the differences among the four types of schools being examined in this study. Twenty-nine of the 30 lowest ranking schools in percent of seniors reading at or above the national average were Non-Selective Segregated High Schools. Collectively these 29 schools had fewer seniors reading at or above the national average than a single Selective Academic High School: Lane Tech.[43]

Table 9 presents the number and percent of seniors who, the test makers predict, will definitely graduate from high school reading below the Minimum Competency Level. As noted in Section 2, these students are more than four years below the national average for reading achievement in the fall of their senior year. Table 9 presents data for the school system overall and for the four types of high schools. Nationally, 18% of high school seniors rank below the Minimum Competency Level. For all Chicago high schools, 29% of high school seniors fell below this level. Chicago's Selective Academic High Schools had 2% of their students reading below the Minimum Competency Level, many fewer than the national average. The percentage of seniors below minimum competency slightly exceeded the national average in Non-Selective Integrated High Schools (20%) and was slightly below the national average in Selective Vocational High Schools (16%). In Non-Selective Segregated High Schools, 41% of seniors were reading below minimum competency (at or below eighth grade level). Thus the percentage of students in these schools who will finish high school reading below the national average is more than double the percentage for the nation.

Table 10 presents school-by-school data about the numbers and percentages of seniors reading below minimum competency.[44] As Table 10 indicates, the percentage of high school seniors reading below minimum competency is 19% or less in 17 schools. These schools have fewer

students below minimum competency than the national average or they are close to the national average. (It should be kept in mind that seven of these schools are Selective Academic and Selective Vocational High Schools that do not admit students with low reading scores in the first place.)

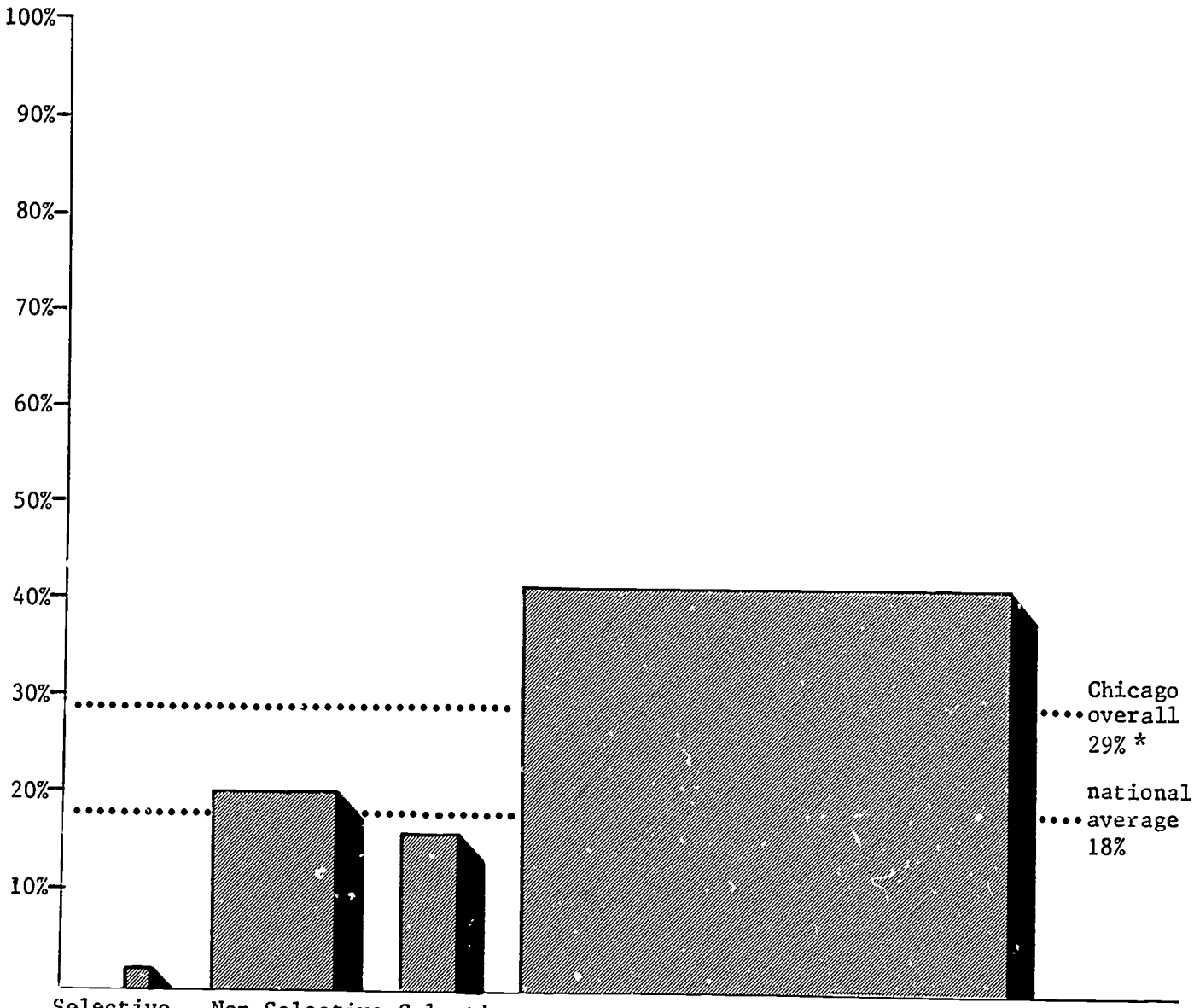
Among those schools with the highest percentage of their seniors reading below minimum competency (at or below eighth grade level), there are 16 schools with 50% or more of their seniors reading below this level. All of these schools are Non-Selective Segregated High Schools. Indeed, 31 of the 33 high schools with the largest percentages of seniors reading below minimum competency were Non-Selective Segregated High Schools.

Some further data about minimum competency for high school seniors have been analyzed by the research team, but not presented in detail in this report. In addition to identifying seniors who definitely will finish their high school careers below minimum competency, the test makers also identify a borderline group that might finish their careers reading below minimum competency, unless they make substantial progress in the final months of their senior year.[45] The test results identified 12% of Chicago's seniors as falling into this borderline category. When these seniors are added to the ones that definitely will finish high school reading below minimum competency (i.e., 29% of seniors), the test results indicate that 41% of Chicago's seniors "will or might" finish high school reading below the minimum competency level.

In Non-Selective High Schools, 54% of seniors "will or might" finish high school reading below minimum competency. In other words, a majority of the seniors in these Non-Selective Segregated schools may graduate from high school with reading achievement below the level that the average student in the United States possesses upon entering high school.[46]

Table 9

Class of 1984 --
Percent of Seniors Who Will Graduate
Reading Below the Minimum Competency Level,
Chicago High Schools Overall and
Four Types of High Schools[47]



Selective Academic High Schs.	Non-Selective Integrated High Schools	Selective Vocational High Schs.	Non-Selective Segregated High Schools
37 of 1,722 seniors below minimum competency (2%)	996 of 4,941 seniors below minimum competency (20%)	332 of 2,015 seniors below minimum competency (16%)	3,919 of 9,624 seniors below minimum competency (41%)

*5,284 of 18,302 seniors below minimum competency (29%)

Table 10

Class of 1984 --
Percent of Seniors Who Will Graduate
Reading Below the Minimum Competency Level,
School-by-School[48]

% READING BELOW MIN'M COMPETENCY	SCHOOL TYPE			
	NON-SELECTIVE SEGREGATED HIGH SCHOOLS	SELECTIVE VOCATIONAL HIGH SCHOOLS	NON-SELECTIVE INTEGRATED HIGH SCHOOLS	SELECTIVE ACADEMIC HIGH SCHOOLS
9% OR LESS	Kenwood-8%		Mather-9%	Lane-1% Young-3% Lindblom-4%
10% TO 19%	Metro-16%	Dunbar-10% Prosser-12% Chicago Voc.-18% Simeon-19%	Bogan-12% Kennedy-14% Hubbard-15% Washington-15% Taft-16% Steinmetz-18% Curie-19%	
20% TO 29%	Morgan Park-20% Hyde Park-23% South Shore-27% Robeson-28% Julian-28%	Westinghouse-23%	Foreman-20% Lincoln Park-20% Von Steuben-26% Schurz-26% Kelly-26% Roosevelt-28%	
30% TO 39%	Corliss-31% Juarez-33% Sullivan-34% Fenger-37% Carver-37% Lake View-37% Harlan-37% Bowen-37%		Amundsen-35%	
40% TO 49%	Near North-41% Kelvyn Park-41% Senn-43% Collins-43% Hirsch-44% Clemente-48% Flower-49%		Gage Park-40%	
50% OR MORE	Phillips-51% King-52% Englewood-52% Richards-53% Calumet-54% Marshall-55% Wells-55% Crane-56% Tilden-57% Austin-59% Harper-60% Farragut-60% Manley-62% DuSable-64% Orr-65% Gregier-67%			

Percent of Well-Prepared Graduates

The analysis of reading achievement just discussed was focused only on those students who advanced to the senior level in the Class of 1984. However, as the earlier analysis of high school completion indicated, these seniors were only a portion of the Class of 1984, since less than half of the original students who were initially enrolled in the Class of 1984 were still enrolled in the class as seniors. As explained in Section 2, the analysis of the Percent of Well-Prepared Graduates for the Class of 1984 took both reading achievement and High School Completion Rate into account. Well-Prepared Graduates were defined as graduates reading at or above the national average. The number of such graduates was divided by the initial Class of 1984 enrollment four years earlier to calculate the Percent of Well-Prepared Graduates.[49] Thus, as explained in Section 2, Percent of Well-Prepared Graduates reflects both a high school's record in holding its students and its students' level of reading achievement.

Table 11 presents data about the Percent of Well-Prepared Graduates for Chicago high schools overall and for the four types of Chicago high schools. The national average for Percent of Well-Prepared Graduates is 36%, taking into account both those students who fail to graduate from high school and those students who graduate but read below the national average for high school seniors.[50] The Percent of Well-Prepared Graduates for the Class of 1984 for all Chicago high schools was 15%, less than half the national average. The Percent of Well-Prepared Graduates for Non-Selective Segregated High Schools was 8%, less than one-fourth of the national average. Of the other types of high schools in Chicago, Selective Academic High Schools substantially exceeded the national average in Percent of Well-Prepared Graduates (60%) while Non-Selective Integrated High Schools and Selective Vocational High Schools ranked well below it (27% and 16% respectively).

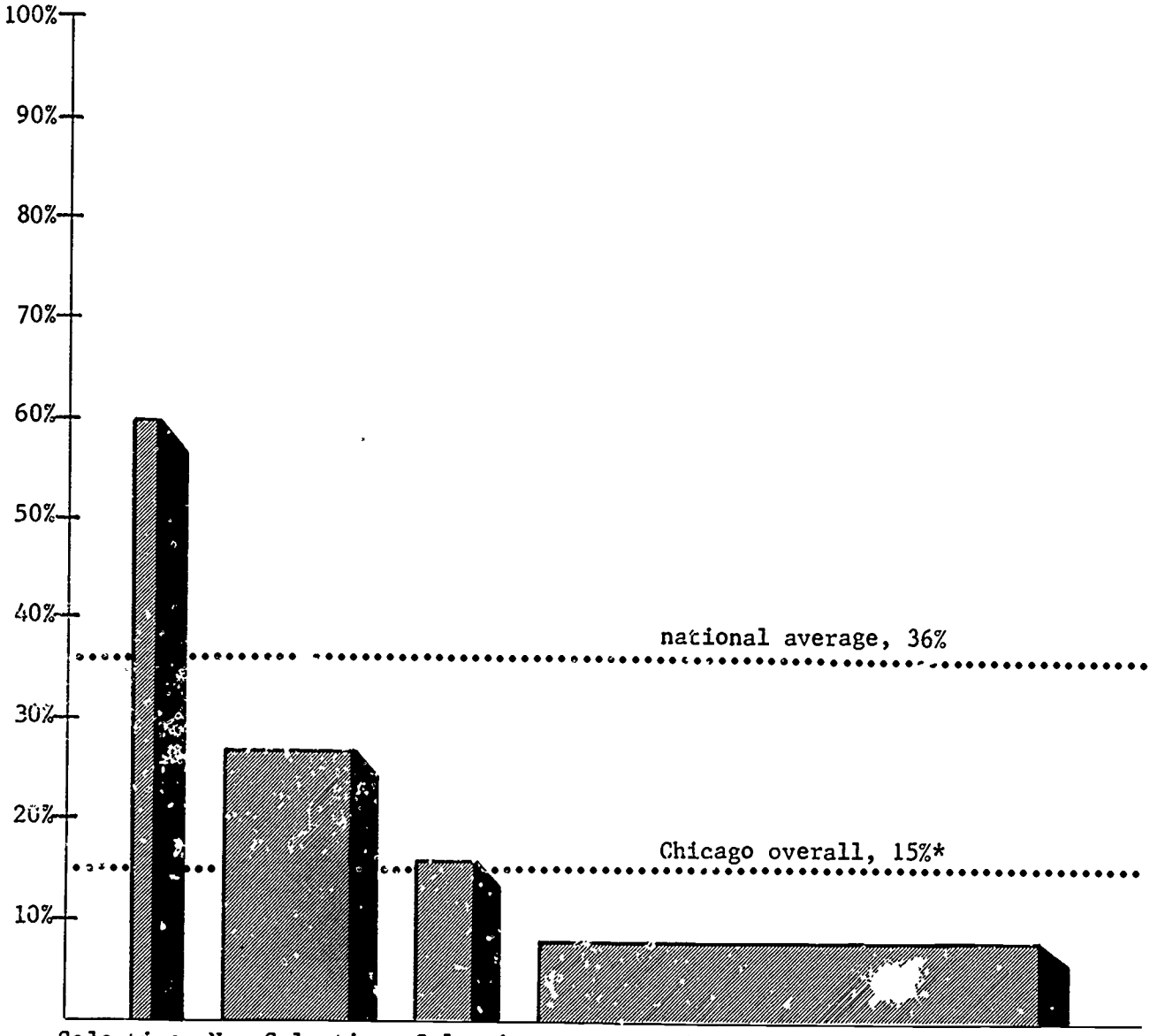
Table 12 provides some additional detail concerning the data about Non-Selective Segregated High Schools presented in Table 11. In round numbers, 25,500 students were enrolled in these Non-Selective Segregated High Schools as ninth graders in 1980-81. Of these students, 16,000 were non-completers, including approximately 14,000 dropouts and 2,000 transfers to other school systems. Among students who graduated, 2,000 graduated reading at or above the national average and 7,500 graduated reading below the national average. Of the 7,500 students reading below the national average, 4,000 of them were reading at or below the eighth grade level, the level designated by the test makers as the Minimum Competency Level.

Table 13 classifies individual schools into four categories, based on their Percent of Well-Prepared Graduates for the Class of 1984.[51] Schools in the highest of these categories ranked near or above the national average of 36%. Schools in the other three categories ranked significantly below the national average.

The Percent of Well-Prepared Graduates for each high school reflects, in part, an estimate of the school's completion rate that may be somewhat higher or somewhat lower than the school's true completion rate. Thus, reviewing additional data about each school's completion rate, the research team identified with an asterisk (*) any schools that might belong in the next highest category on the chart, based on this data review. For example, the true Percent of Well-Prepared Graduates at Sullivan High School might possibly fall into the 11%-20% category rather than the 10% or less category, based on a review of data about the completion rate of recent high school classes at Sullivan; thus Sullivan received an asterisk. Based on this school-by-school review, 11 schools received an asterisk.[52]

Table 11

Class of 1984 --
Percent of Well-Prepared Graduates,
Chicago High Schools Overall and
Four Types of High Schools[53]

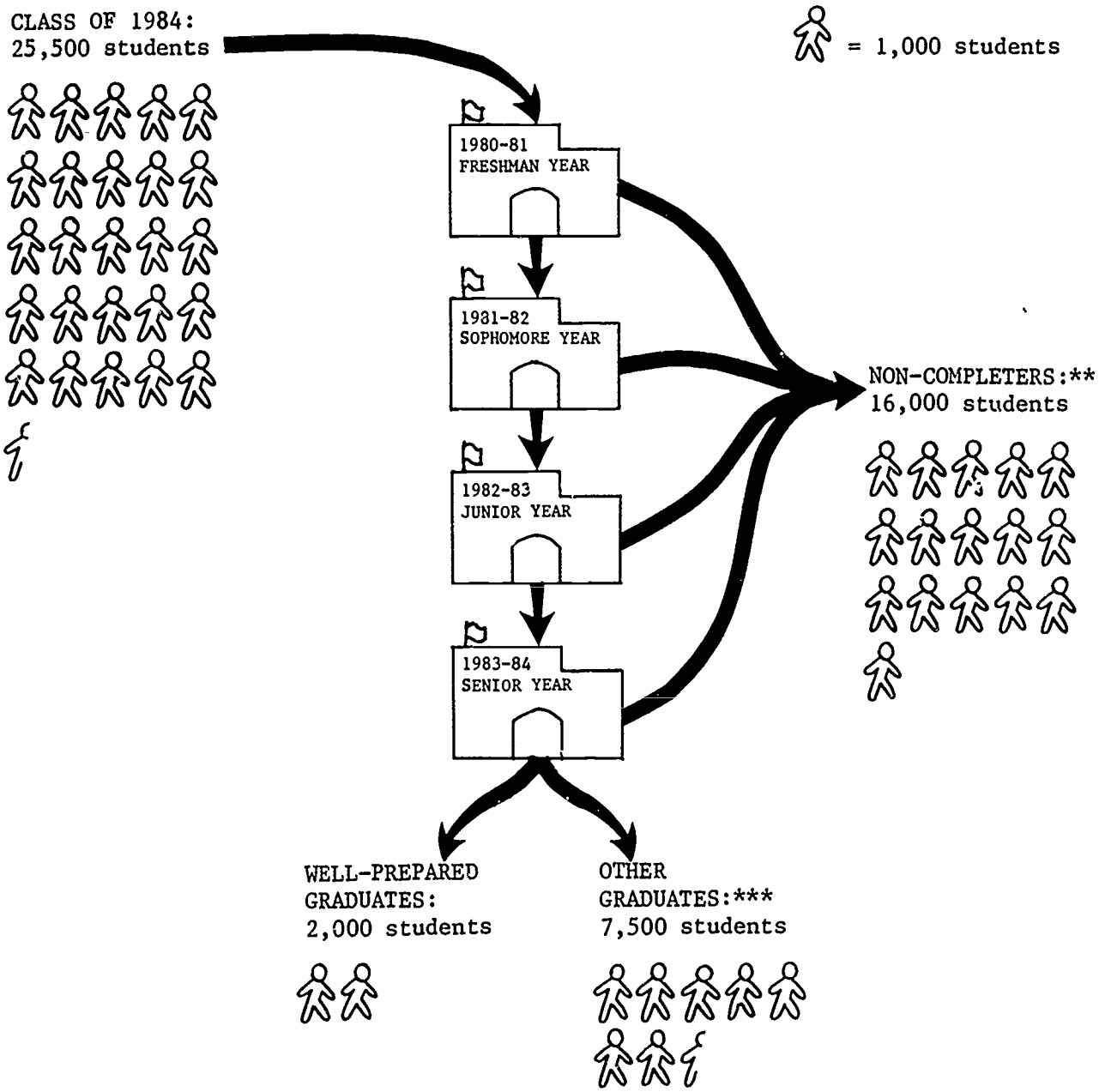


Selective Academic High Schs.	Non-Selective Integrated High Schools	Selective Vocational High Schs.	Non-Selective Segregated High Schools
1,419 of 2,357 are well-prepared graduates (60%)	2,095 of 7,623 are well-prepared graduates (27%)	635 of 3,887 are well-prepared graduates (16%)	1,929 of 25,491 are well-prepared graduates (8%)

*6,078 of 39,358 are well-prepared graduates (15%)

Table 12

Class of 1984 --
Approximate Numbers* of Well-Prepared Graduates,
Other Graduates, and Non-Completers in
Non-Selective Segregated High Schools[54]



*Rounded to the nearest five hundred.

**Non-Completers include both students who have dropped out of school entirely and students who have transferred to other school systems. For reasons explained in Sections 2 and 3, we estimate that, in the Class of 1984, there were about 14,000 Dropouts and 2,000 Transfers to other school systems from Non-Selective Segregated High Schools.

***As data presented in Section 3 indicate, there were approximately 4,000 students among these 7,500 Other Graduates who were reading at or below the eighth grade level, the level designated by test makers as the Minimum Competency Level.

Table 13

Class of 1984 --
Percent of Well-Prepared Graduates,
School-by-School[55]

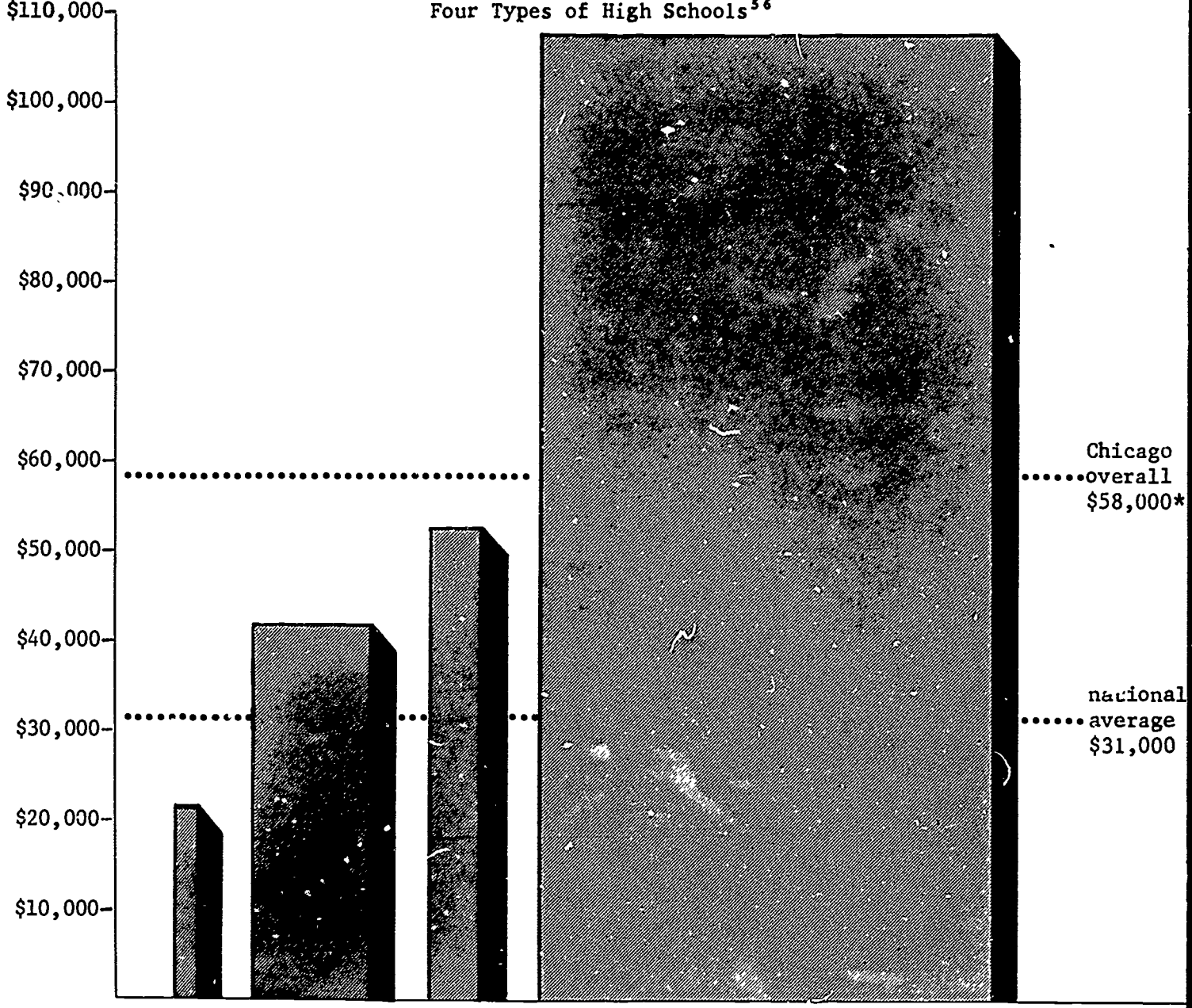
WELL-PREPARED GRADUATES, % RANGES	SCHOOL TYPE			
	NON-SELECTIVE SEGREGATED HIGH SCHOOLS	SELECTIVE VOCATIONAL HIGH SCHOOLS	NON-SELECTIVE INTEGRATED HIGH SCHOOLS	SELECTIVE ACADEMIC HIGH SCHOOLS
MORE THAN 30%	Kenwood Metro		Bogan Mather Taft Washington	Lane Young Lindblom
30% TO 21%	Morgan Park	Prosser*	Curie* Hubbard* Steinmetz* Von Steuben Kennedy* Foreman Kelly	
20% TO 11%	Juarez Hyde Park Kelvyn Park Harlan Senn Julian Corliss	Dunbar** Chicago Voc.* Westinghouse Simeon	Roosevelt Amundsen Gage Park Lincoln Park Schurz	
10% OR LESS	Sullivan* Clemente Lake View* Hirsch Fenger* South Shore Bowen* Wells Near No.* Phillips Robeson Crane Calumet Richards Farragut Orr Tilden Cregier Carver Marshall Collins Manley Englewood DuSable King Austin Harper Flower			

*The Percent of Well-Prepared Graduates for each high school reflects, in part, an estimate of the school's completion rate that may be somewhat higher or lower than the true completion rate. The research team examined data about each high school's completion rate for the prior three graduating classes, taking into account a completion rate calculated using senior spring enrollment and a completion rate using the school's reported number of graduates. The research team also examined ninth and tenth grade enrollments over this period to identify schools which seemed to be holding back large numbers of ninth graders. Based on this review, this school's true Percent of Well-Prepared Graduates for the Class of 1984 may fall in the next highest category on the chart.

**Data from the prior three years indicated a wide variety of completion rates at Dunbar. This suggests that Dunbar's true Percent of Well-Prepared Graduates for the Class of 1984 may fall into another category, either higher or lower, from the one in which it is placed.

Table 14

Class of 1984 --
Cost Per Well-Prepared Graduate,
Chicago High Schools Overall and
Four Types of High Schools[56]



Selective Academic High Schs.	Non-Selective Integrated High Schools	Selective Vocational High Schs.	Non-Selective Segregated High Schools
$29,336,000 invested, 1,419 well-prepared graduates produced ($21,000 per well-pre'd graduate)	$85,235,000 invested, 2,095 well-prepared graduates produced ($41,000 per well-pre'd graduate)	$33,124,000 invested, 638 well-prepared graduates produced ($52,000 per well-prepared graduate)	$206,711,000 invested, 1,929 well-prepared graduates produced ($107,000 per well-prepared graduate)

*$354,411,000 Invested 6,078 Well-Prepared Graduates Produced ($58,000 Per Well-Prepared Graduate).

Reviewing data for individual schools as presented in Table 13, then, 9 Chicago high schools ranked near or above the national average of 36% and 53 ranked significantly below it. In 28 schools, 10% or less of the original ninth grade students in the Class of 1984 both graduated from high school and read at or above the national average. As Table 13 indicates, all 28 of these schools were Non-Selective Segregated High Schools.

Costs of Producing a Well-Prepared Graduate

As explained in Section 2, analyzing the costs of producing a Well-Prepared Graduate is one way of assessing the cost effectiveness of the school system and of individual schools.

Cost Per Well-Prepared Graduate was calculated by dividing the total amount spent on the Class of 1984 over a four-year period by the number of Well-Prepared Graduates in the Class of 1984, i.e., those who left school with both a diploma and the ability to read at or above the national average.

Note that this method of analysis does not imply that the dollar cost per well-prepared graduate was actually spent on these particular well-prepared students; rather it was the amount of money invested in the entire class over a four-year period for each Well-Prepared Graduate produced.

Table 14 presents the costs of producing a Well-Prepared Graduate for all Chicago high schools and for each of the four types of high schools. Nationally, the cost of producing a Well-Prepared Graduate is approximately $31,000.[57] As Table 14 indicates, the comparable cost figure was $58,000 for all Chicago High Schools, $21,000 for Selective Academic High Schools, $41,000 for Non-Selective Integrated High Schools, $52,000 for Selective Vocational Schools, and $107,000 for Non-Selective Segregated High Schools.[58]

As noted in Section 2, several points should be kept in mind in interpreting these cost data. First, one would expect the costs of producing a well-prepared graduate to be higher in urban schools in general and in segregated schools serving low-income neighborhoods in particular. And the cost figures for Chicago's Selective Academic and Selective Vocational High Schools are improved by the fact that these schools can choose the highest achieving students to begin with.

However, taking these factors into account, one can still decide whether the Cost Per Well-Prepared Graduate is reasonable in Chicago, as compared with the nationai average. As noted above, the Cost Per Well-Prepared Graduate for Chicago's Non-Selective Segregated High Schools was over four times the national average. This high cost figure directly reflects the high dropout rates and low reading achievement levels in these schools.

School-by-school cost data are presented in Table 15. As was the case with earlier calculations of High School Completion Rate and Percent of Well-Prepared Graduates, Cost Per Well-Prepared Graduate is an estimate that may vary somewhat from the true cost. Taking this variability into account, the research team reviewed relevant school data and placed an asterisk (*) by any school that might in fact actually belong in the next lowest cost category from the one in which it was placed based on Class of 1984 data.[59]

The school-by-school cost data in Table 15 underscore the high Cost Per Well-Prepared Graduate in Non-Selective Segregated High Schools. The twenty-four high schools with a Cost Per Well-Prepared Graduate in excess of $120,000 were all Non-Selective Segregated High Schools. As Table A-6 indicates, fifteen of these schools had a Cost Per Well-Prepared Graduate that exceeded $200,000. These high Costs Per Well-Prepared Graduate are a direct reflection of the high dropout rates and low levels of senior reading achievement in these schools.

Table 15

Class of 1984 --
Cost Per Well-Prepared Graduate,
School-by-School[60]

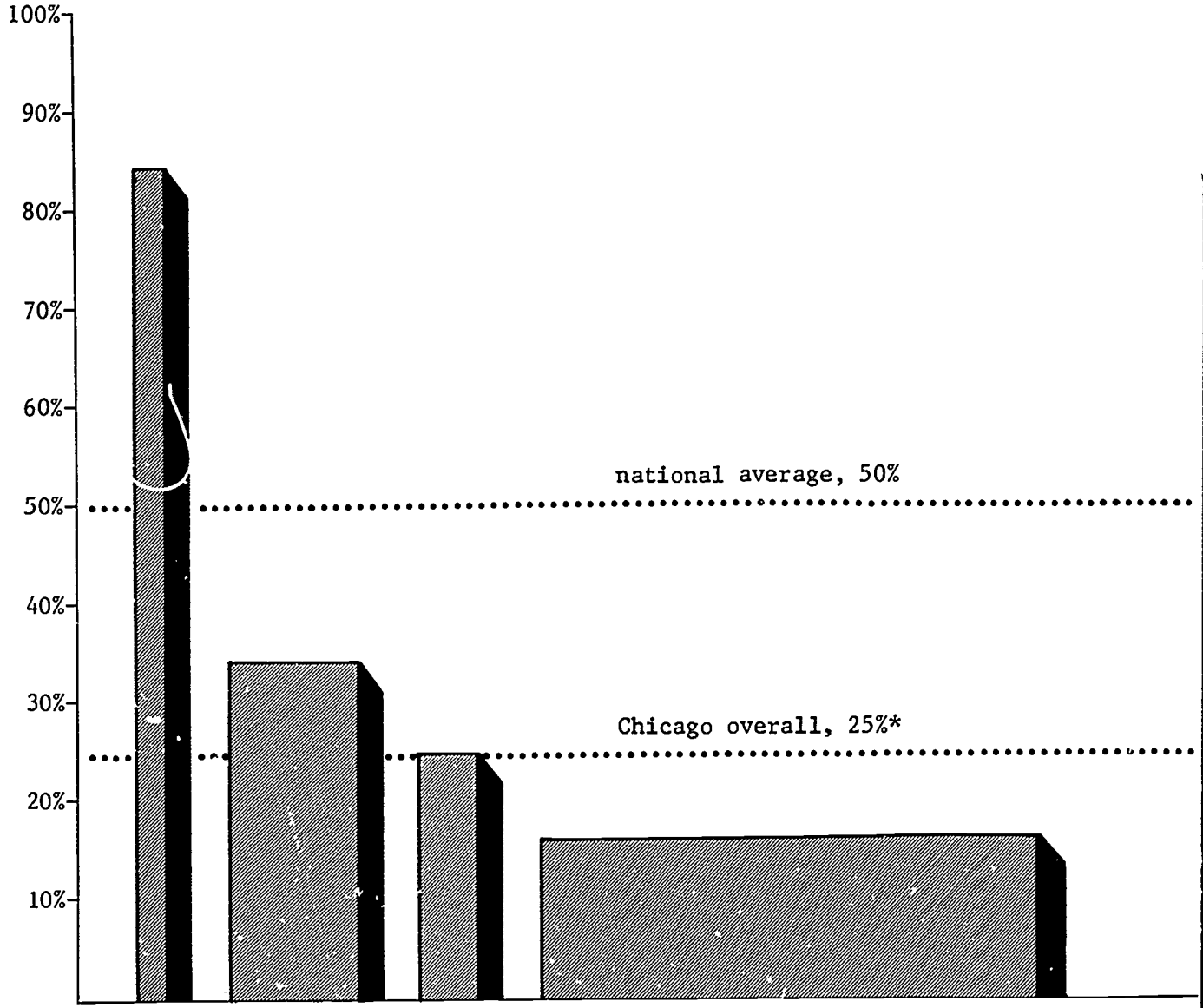
COST PER WELL-PREPARED GRADUATE	SCHOOL TYPE			
	NON-SELECTIVE SEGREGATED HIGH SCHOOLS	SELECTIVE VOCATIONAL HIGH SCHOOLS	NON-SELECTIVE INTEGRATED HIGH SCHOOLS	SELECTIVE ACADEMIC HIGH SCHOOLS
$40,000 OR LESS	Kenwood	Prosser	Bogan Mather Taft Steinmetz Kennedy Washington	Lane Lindblom Young
$41,000 TO $80,000	Metro* Morgan Park* Hyde Park Julian Corliss	Chicago Voc.* Dunbar** Simeon Westinghouse	Hubbard Curie* Foreman Kelly Lincoln Park Schurz Von Steuben Amundsen Roosevelt	
$81,000 TO $120,000	Harlan Juarez* Fenger* Kelvyn Park Sullivan* Senn Bowen Lake View		Gage Park	
MORE THAN $120,000	Calumet Robeson Hirsch* Carver King* Collins Clemente Near North Tilden So. Shore* Farragut Englewood Phillips Harper Wells Richards DuSable Crane Orr Marshall Manley Austin Flower Gregier			

*The Cost Per Well-Prepared Graduate for each high school, as with the Percent of Well-Prepared Graduates, reflects, in part, the school's High School Completion Rate. Since the true completion rate for a particular school may actually be higher or lower than the calculated completion rate, the calculated Cost Per Well-Prepared Graduate may vary from the actual cost. Taking the degree of variability into account, this school's true Cost Per Well-Prepared Graduate for the Class of 1984 may fall in the next lowest numerical category on the chart (e.g., Sullivan's true Cost Per Well-Prepared Graduate may fall in the "$41,000 to $80,000" range rather than the "$81,000 to $120,000" range).

**Based on a review of prior years, Dunbar's completion rates were highly variable. This suggests that Dunbar's Cost Per Well-Prepared Graduate for the Class of 1984 may fall in another category, either higher or lower, from the one in which it is placed.

Table 16

Class of 1987 --
Percent of Freshmen Reading At or Above
the National Average in Fall 1983,
Chicago High Schools Overall and
Four Types of High Schools[61]



Selective Academic High Schs.	Non-Selective Integrated High Schools	Selective Vocational High Schs.	Non-Selective Segregated High Schools
1,871 of 2,237 fresh. at or above national average (84%)	2,806 of 8,143 freshmen at or above national average (34%)	873 of 3,490 fresh. at or above national average (25%)	3,284 of 21,010 freshmen at or above national average (16%)

*8,834 of 34,880 freshmen at or above the national average (25%)

Reading Achievement of Ninth Graders in the Class of 1987

It might be argued that students in the Class of 1984 entered high school before a number of reforms were instituted in the elementary schools, and that the completion rates and reading achievement of the Class of 1984 are not a fair measure of the impact of recent reform projects instituted in the system. To investigate this possibility, the research team analyzed the reading achievement of those 34,880 students who were enrolled in high school as ninth graders in fall 1983 and who comprise the Class of 1987. Because most of these students took the Tests of Achievement and Proficiency in November 1983, just a few months after entering high school, their scores on these tests are a reflection of the success of the elementary school program in preparing them for high school.[62]

Table 16 presents the number and percent of these ninth graders reading at or above the national average for Chicago high schools overall and for the four different types of high schools. For the school system as a whole, 25% were reading at or above the national average, as compared with 50% nationally. In Selective Academic High Schools, this percentage exceeded the national average and stood at 84%. In the other three types of high schools, this percentage was well below the national average and stood at 34% for Non-Selective Integrated Schools, 25% for Selective Vocational High Schools, and 16% for Non-Selective Segregated High Schools.

Table 17 presents the percent of freshmen reading at or above the national average on a school-by-school basis. Five high schools exceeded the national average in this regard, while 57 fell below it. In the 17 lowest-ranking high schools, fewer than 10% of freshmen read at or above the national average, compared with a national figure of 50%. All are Non-Selective Segregated High Schools.

Table 18 presents the number and percent of freshmen who, the test makers predict, will definitely finish high school reading below Minimum Competency Level. Table 18 presents data for Chicago high schools overall and for the four types of high schools. As indicated in Section 2, the test makers identify students, based on their ninth grade reading scores, who will definitely finish high school reading more than four years below twelfth grade level, even if they remain in high school through graduation. The test makers project that nationally 18% of ninth graders have reading scores so low that they will graduate with reading ability below the Minimum Competency Level.[63] In Chicago high schools overall, 30% of ninth graders are below this Minimum Competency Level. In Chicago's Selective Academic High Schools, the comparable percentage was less than 1%. In Chicago's Selective Vocational Schools, the percent who will finish high school reading below minimum competency also was less than the national average and stood at 15%. For Non-Selective Integrated High Schools, the projected percentage was 19%. For Non-Selective Segregated High Schools, the projected percentage was 40%.

Table 19 presents school-by-school data about the percentages of ninth graders who the test makers predict will finish high school reading below the Minimum Competency Level.[64] As Table 19 indicates, the percentage of ninth graders who were reading below minimum competency was equal to or better than the national average in 20 schools and worse than the national average in 42 schools. At the bottom of the list, 11 high schools had more than 50% of their ninth grade students below the minimum competency cutoff. Twenty-two of the 23 schools with the largest percentage of students below minimum competency were Non-Selective Segregated High Schools.

Overall, what do these data about ninth graders in the Class of 1987 tell us? The results clearly indicate that Chicago's elementary

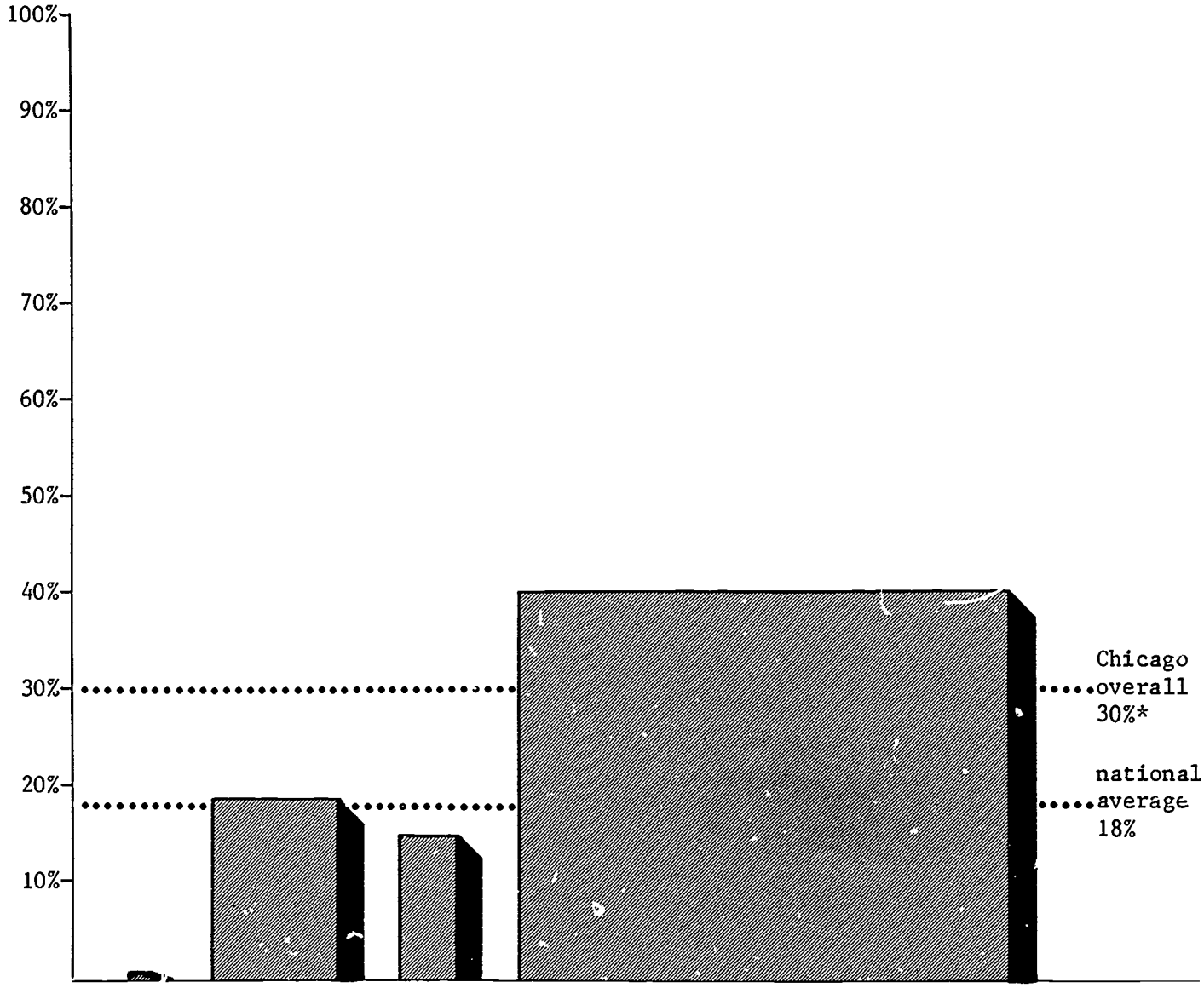
Table 17

Class of 1987 --
Percent of Freshmen Reading At or Above
the National Average in Fall 1983,
School-by-School[65]

% READING AT OR ABOVE NAT'L AVG.	SCHOOL TYPE			
	NON-SELECTIVE SEGREGATED HIGH SCHOOLS	SELECTIVE VOCATIONAL HIGH SCHOOLS	NON-SELECTIVE INTEGRATED HIGH SCHOOLS	SELECTIVE ACADEMIC HIGH SCHOOLS
75% OR MORE				Lane-85% Young-83%
74% TO 50%	Kenwood-63%		Von Steuben-66%	Lindblom-74%
49% TO 25%	Morgan Park-43% Metro-39% Hyde Park-33%	Prosser-41% Dunbar-27%	Lincoln Park-49% Mather-49% Taft-45% Curie-40% Washington-37% Bogen-37% Steinmetz-33% Kennedy-30% Amundsen-28% Roosevelt-28%	
LESS THAN 25%	Julian-24% Juarez-24% Lake View-23% Senn-21% Sullivan-17% Fenger-15% Harlan-14% Bowen-14% Clemente-14% Hirsch-14% Corliss-14% Richards-13% Carver-13% Near North-13% Kelvyn Pk-13% Wells-13% So. Shore-10% Crane-9% Farragut-9% King-9% Tilden-7% Robeson-7% Marshall-7% Manley-7% Collins-6% Austin-6% DuSable-6% Englewood-6% Calumet-5% Flower-5% Harper-5% Cregier-5% Phillips-5% Orr-4%	Chicago Voc.-23% Simeon-22% Westinghouse-17%	Hubbard-24% Schurz-22% Foreman-22% Kelly-20% Gage Park-14%	

Table 18

Class of 1987 --
Percent of Freshmen Who Will Graduate
Reading Below the Minimum Competency Level,
Chicago High Schools Overall and
Four Types of High Schools[66]



Selective Academic High Schs.	Non-Selective Integrated High Schools	Selective Vocational High Schs.	Non-Selective Segregated High Schools
15 of 2,237 freshmen below minimum compet'y (<1%)	1,581 of 8,143 freshmen below minimum competency (19%)	516 of 3,490 freshmen below minimum compet'y (15%)	8,419 of 21,010 freshmen below minimum competency (40%)

*10,531 of 34,880 freshmen below minimum competency (30%)

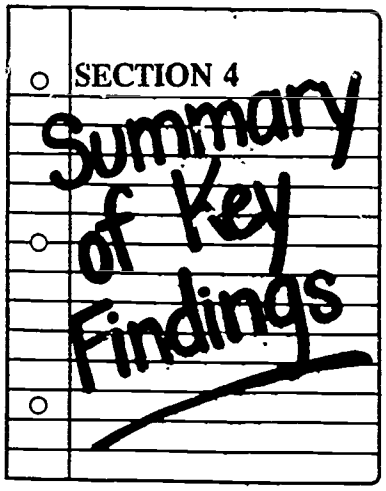
Table 19

Class of 1987 --
Percent of Freshmen Who Will Graduate
Reading Below the Minimum Competency Level,
School-by-School[67]

% READING BELOW MIN'M COMPETENCY	SCHOOL TYPE			
	NON-SELECTIVE SEGREGATED HIGH SCHOOLS	SELECTIVE VOCATIONAL HIGH SCHOOLS	NON-SELECTIVE INTEGRATED HIGH SCHOOLS	SELECTIVE ACADEMIC HIGH SCHOOLS
9% OR LESS	Metro-5% Kenwood-7%	Prosser-5%	Von Steuben-8%	Lane- < 1% Lindblom- < 1% Young-1%
10% TO 19%	Morgan Park-10% Julian-18% Hyde Park-19%	Dunbar-12% Westinghouse-17% Simeon-18% Chicago Voc.-18%	Taft-10% Curie-11% Mather-11% Bogan-13% Lincoln Park-13% Steinmetz-14% Washington-18%	
20% TO 29%	Lake View-22% Senn-27% Juarez-28% Sullivan-29%		Hubbard-23% Foreman-23% Schurz-24% Roosevelt-25% Kennedy-26% Amundsen-26%	
30% TO 39%	Hirsch-34% Curliss-34% Harlan-35% Near North-35% Fenger-38% South Shore-39% Richards-39%		Kelly-35%	
40% TO 49%	Kelvyn Pk-41% Clemente-42% Robeson-44% King-46% Carver-46% Wells-47% Bowen-48% Manley-48% Harper-48% Marshall-49% Flower-49%		Gage Park-42%	
50% OR MORE	Englewood-50% Calumet-50% Crane-52% Collins-53% Farragut-53% Phillips-54% Tilden-55% DuSable-56% Austin-56% Crerier-59% Orr-60%			

schools continue to fail in adequately preparing students for high school work. Only 25% of Chicago's ninth graders read above the national average, as compared with 50% across the country. Thirty percent of ninth graders read so poorly that they will definitely finish high school reading at or below the eighth grade level, even if they remain to graduate; this compares with 18% nationally.[68] What is true for ninth graders in the system as a whole is even more true for ninth graders in Non-Selective Segregated High Schools, where only 16% of ninth graders read at or above the national average and 40% will definitely finish high school reading below minimum competency level.

It is risky to closely compare results for seniors in the Class 1984 with results for ninth graders in the Class of 1987, because of Chicago's substantial dropout rate and for several technical reasons.[69] (As explained in Section 2, it would have been more desirable to compare data about ninth graders in the Class of 1987 with ninth graders in the Class of 1984, but detailed data about ninth graders in the Class of 1984 were not available to us.) However, even making a cautious comparison, it is possible to conclude that the data for the Class of 1987 provide little hope that the high school performance of the Class of 1987 will be substantially better than the performance of the Class of 1984. Nor do these data indicate that substantial improvement is taking place in the achievement levels of those students in the Class of 1987 who have entered Chicago's Non-Selective Segregated High Schools, and are by and large the product of segregated elementary schools.



In Section 4, we briefly summarize those findings presented in Section 3 that have important policy implications for the Chicago Public Schools. Section 5 builds on this summary by presenting an interpretation of these key findings and specific reform recommendations.

Most of the findings summarized below underscore continuing severe problems of Chicago's public elementary schools and high schools that should be of major concern to those who care about the future of the city. These problems must become the focus for fundamental sustained changes in the school system.

Findings About High School Completion

Finding 1. The High School Completion Rate for Chicago overall is about 47%. Thus approximately 50% of those who enter high school in the ninth grade fail to complete high school within the Chicago Public Schools (see Table 3). This overall rate of non-completion has not changed substantially over the past five graduating classes (see Table 5). Allowing for an estimated 8% of students who transfer out of the system and enroll elsewhere, it appears that Chicago's dropout rate is approximately 45%.

Finding 2. In Selective Academic High Schools, an estimated 73% of students who enroll as ninth graders remain to graduate within the Chicago Public Schools (see Table 3). Further investigation using the Student Tracking Method is needed to determine what portion of the approximately 27% of non-completers in Selective Academic High Schools are dropouts, what percent are transfers either inside or outside the school system, and why students either transfer or drop out in these schools. Since Chicago's Selective Academic High Schools have the ability to choose the very

best achievers from among Chicago Public School students (the top 10% or better), these selective high schools should have completion rates similar to those of suburban high schools. The average completion rate in suburban Cook County high schools is 92%.

Finding 3. In Non-Selective Integrated Schools, an estimated 65% of those who enroll as ninth graders remain to graduate from the Chicago Public Schools (see Table 3). This completion rate can be compared cautiously with the national rate of 73%. However, based on data about individual schools, there appears to be significant transferring into and out of these Non-Selective Integrated schools. Use of the Student Tracking Method is necessary to determine more definitively how the completion rates in these individual schools compare with the national average.

Finding 4. In Selective Vocational High Schools, an estimated 52% of those who enroll as ninth graders remain to graduate from the Chicago Public Schools (see Table 3). Since these schools can exercise substantial selectivity in choosing their students, further analysis using the Student Tracking Method is needed to determine why the completion rate in these schools falls so far below the national average of 73%.

Finding 5. In Non-Selective Segregated High Schools, only an estimated 38% of those who enroll as ninth graders remain in this type of school to graduate (see Table 3). These schools enroll almost two-thirds of the ninth graders who enter high school in Chicago. These data reflect an extreme problem at the heart of the educational program of the Chicago Public Schools.

Finding 6. In Non-Selective Segregated High Schools that are predominantly black, only an estimated 35% of those who enroll as ninth graders remain to graduate from the Chicago Public Schools. In Non-Selective Segregated High Schools that are predominantly Hispanic, only an estimated 36% of those who enroll as ninth graders remain to graduate from the Chicago Public Schools (see Table 4). These data indicate that the problem of non-completion in these segregated high schools is equally severe for both black and Hispanic students.

Findings About the Reading Achievement of High School Seniors

Finding 7. The percent of high school seniors in Chicago who read at or above the national average is 33%, compared with the 50% rate nationally (see Table 7). The percent of high school seniors who read more than four years below grade level (the Minimum Competency Level) is 29% in Chicago, compared with an 18% rate nationally (see Table 9). Thus, even with the school system's high dropout rate, those students still remaining as seniors are achieving far below national standards.

Finding 8. In Selective Academic High Schools, the percent of seniors reading at or above the national average (82%) substantially exceeds the norm across the country (see Table 7). However, it is also true that ninth graders who enroll in these schools substantially exceed the national average in reading achievement prior to enrollment and that, as noted above, these schools have a significant non-completion rate. Additional research is needed, following students over time, to determine whether the reading achievement of students attending these schools improves, remains the same, or declines relative to national norms during their period of enrollment.

Finding 9. In Non-Selective Integrated High Schools overall, 42% of seniors are reading at or above the national average, compared with 50% across the country (see Table 7). In several individual schools within the group, the percent of seniors reading at or above the national average exceeds or at least approaches national norms (see Table 8). Several of the schools showing good results have selective programs within them. Further research is needed to distinguish between the impact of initial selectivity in admitting students and the impact of the school's educational program on the reading scores of seniors in Non-Selective Integrated High Schools.

Finding 10. In Chicago's Selective Vocational High Schools, 32% of seniors are reading at or above the national average, compared with 50% of seniors across the country (see Table 7). Thus, seniors in these schools are far below national norms, despite the selectivity of these schools and their high non-completion rate.

Finding 11. In Chicago's Non-Selective Segregated High Schools, only 20% of seniors are reading at or above the national average, compared with 50% across the country (see Table 7). The 29 lowest ranking Non-Selective Segregated High Schools produced fewer seniors reading at or above the national average than a single Selective Academic High School: Lane Tech (see Table A-3). At the same time 41% of seniors in Non-Selective Segregated High Schools read more than four years below grade level as seniors (i.e., below the Minimum Competency Level), compared with the national average of 18% (see Table 9). In 16 of these high schools, more than half the seniors are reading below the Minimum Competency Level (see Table 10). These data reflect an extreme failure of the Non-Selective Segregated High Schools in teaching even those students who have stayed in school for twelve years to read.

Findings About Percent of Well-Prepared Graduates

Finding 12. The statistic labelled "Percent of Well-Prepared Graduates" takes into account a school's success both in holding students in school to the point of graduation and in teaching them to read well. In the high schools overall,

only 15% of the original ninth grade enrollment both graduated and could read at or above the national average, compared with 36% across the nation (see Table 11). Chicago high schools are producing Well-Prepared Graduates at substantially less than half the national rate.

Finding 13. In Non-Selective Integrated High Schools, 27% of the original ninth grade enrollment both graduate and read at or above the national average (see Table 11). Similarly, the Percent of Well-Prepared Graduates from Selective Vocational High Schools is 16% (see Table 11). These results are significantly below the national average of 36%.

Finding 14. Only 8% of the original ninth grade enrollment of Non-Selective Segregated High Schools both graduated and could read at or above the national average; this was less than one-fourth the rate for the preparation of Well-Prepared Graduates nationally (see Tables 11 and 12). Among Non-Selective Segregated High Schools, 28 high schools had 10% or fewer Well-Prepared Graduates (see Table 13).

Findings About the Costs of Producing a Well-Prepared Graduate

Finding 15. Cost Per Well-Prepared Graduate is calculated by dividing the total amount spent on a class of students over a four-year period by the number of Well-Prepared Graduates who are produced as a result of this overall expenditure. In the high schools overall, the Cost Per Well-Prepared Graduate is $58,000, compared with a national average of $31,000 (see Table 14). Naturally, one would expect the Cost Per Well-Prepared Graduate to be somewhat higher than the national average in an urban school system like Chicago. However, Chicago's high Cost Per Well-Prepared Graduate, which is a direct reflection of the high dropout rate and the low level of senior reading achievement documented above, exceeds reasonable limits. While it is certainly true that the Chicago Public Schools needs additional resources, this cost-effectiveness statistic points to a strong need to make better use of existing resources.

Finding 16. The Cost Per Well-Prepared Graduate in Chicago's Selective Academic High Schools is $21,000, compared with the national average of $31,000 (see Table 14). One should remember in evaluating these cost data that Chicago's Selective Academic High Schools only admit students initially who have a high probability of graduating with reading achievement levels well above the national average.

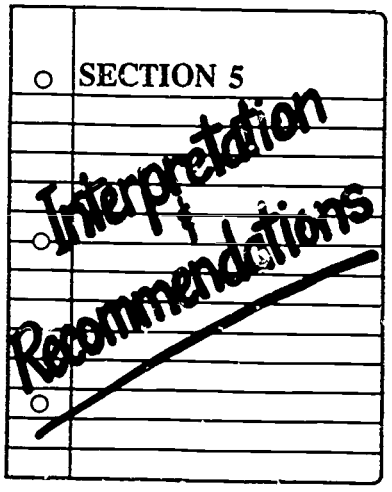
Finding 17. The Cost Per Well-Prepared Graduate in Chicago's Non-Selective Integrated High Schools is $41,000 (see Table 14). The Cost Per Well-Prepared Graduate in Chicago's Selective Vocational High Schools is $52,000 (see Table 14). These costs reflect graduation rates and levels of reading achievement in these schools that fall significantly below the national average.

Finding 18. The Cost Per Well-Prepared Graduate in Chicago's Non-Selective Segregated High Schools is $107,000, compared with a national average of $31,000 (see Table 14). In 15 of these high schools, the Cost Per Well-Prepared Graduate exceeds $200,000 (see Table 15). These cost figures reflect the extremely high dropout rates and low reading achievement levels in these schools. While it is certainly true that additional funds should be invested in these schools, it is also true that these data indicate an extremely inefficient use of existing resources.

Findings About the Reading Achievement of Ninth Graders in the Class of 1987

Finding 19. The percent of ninth graders in the Class of 1987 who read above the national average is 25%, compared with a national average of 50% (see Table 16). The percent of ninth graders who will definitely finish high school reading more than four years below grade level, even if they remain to graduate, is 30%, compared with a national average of 18% (see Table 18). Since these tests were administered shortly after these students entered high school, they are clear-cut evidence about the effectiveness of Chicago's elementary schools. This deficit in reading achievement for ninth graders indicates that Chicago's elementary schools are failing to adequately prepare students for high school work, and that reforms initiated over the past several years in an effort to improve elementary school reading achievement have failed to bring Chicago students significantly closer to national standards.

Finding 20. The reading achievement of Chicago's ninth graders is especially low in Chicago's Non-Selective Segregated High Schools. In these schools only 16% of ninth graders are reading at or above the national average, compared with the 50% figure nationally (see Table 16). And the percent of ninth graders in these schools who will definitely finish high school reading more than four years below grade level, even if they remain in school for four years is 40% in these schools, compared with 18% nationally (see Table 18). Thus, the overall problems of Chicago's recent ninth graders are particularly severe for Non-Selective Segregated High Schools, and reflect an extreme deficiency in the elementary school education of these students.



In Sections 1 through 4, we have presented the rationale, methods, and results of a study of completion rates and reading achievement in Chicago's public high schools. This research project was carried out to provide a bottom-line assessment of how well the school system is fulfilling its first obligation: to produce graduates who can read well.

Even for those familiar with the difficulties of the Chicago Public Schools, the results of this analysis are shocking. It is difficult to imagine, for example, how a Chicago high school can spend $6.5 million on the education of a high school class that initially contained more than 900 students, yet end up with fewer than 20 graduates who can read at or above the national average.

However, we did not undertake this study nor decide to publish it only to document the depths of the school system's problems. The work of Designs for Change focuses primarily on identifying practical solutions to urban school problems, based on reforms that have proven themselves in big cities across the country. We want to help those who care about Chicago's schools to restructure a school system in a way that is adequate to move the system from its present pattern of failure.

In Section 5, we interpret study results and make recommendations for reform. Study results themselves are one principal basis for these recommendations. However, Designs for Change draws on a number of other

sources of information in recommending an agenda for reform. Designs for Change is a leading research organization with a national reputation for its studies of the operation of urban public school systems and the steps that are needed to bring about real improvements in urban schools -- improvements that will actually result in better school experiences for students. With funding from Carnegie Corporation of New York, The Ford Foundation, and the National Institute of Education, Designs for Change has studied the process of urban school reform not only in Chicago, but also in such cities as New York, Philadelphia, Boston, St. Louis, Cleveland, Seattle, and San Diego.[70] We have also carried out long-term projects to improve the Chicago Public Schools through assistance to parents, teachers, school principals, community groups, and business people.[71] And in spring 1984, we held state-wide hearings on the educational barriers confronting poor and minority children in Illinois, with a special emphasis on Chicago.[72]

It is by drawing on this combination of research information and direct experience that we have developed the analysis and recommendations presented below.

The Future of the Schools and the Future of the City

The data presented in this report must be understood first and foremost as documenting a human tragedy of enormous dimensions. The data about the Class of 1984 reflect massive failure in our public schools that destroys the lives of thousands of Chicago's young people each year. Most of these young people are permanently locked out of our changing economy and have no hope of continuing their education or getting a permanent job with a future.

Further, the failures of our schools do more than destroy the lives of our children. As the Mayor's Transition Team on Education concluded:

> Because of rapidly changing economic conditions, shortcomings in Chicago education threaten the City's economic life in a new and extremely frightening way. The Chicago economy has historically contained a diversified manufacturing sector that has provided well-paying jobs to large numbers of workers with limited academic skills. In recent years this sector of Chicago's economy has contracted permanently -- much faster than many economists had predicted that it would. Sectors of the City's economy that have the potential to grow in the future -- such as finance, services, health care, and specialized manufacturing -- will uniformly require a highly literate work force.[73]

Recently, The Commercial Club of Chicago also identified such areas as financial services, health care, and computer software development as areas with potential for growth in Chicago.[74] The Commercial Club and other planning groups are pinning their hopes for the city's economic future on the development of new jobs in small and medium-sized businesses spread across Chicago's neighborhoods.[75] Historically, such smaller businesses have been the major source of new jobs. However, unless the Chicago schools can begin to meet their bottom-line obligation by producing graduates who can read well, such new businesses will not have qualified job applicants available in their neighborhoods, and the hoped-for economic renaissance will never come.

Radical improvements in the schools are vital to the development of healthy Chicago neighborhoods, not only because good schools are crucial for economic development, but also because a good school is a critical part of the social fabric of a viable neighborhood. Effective schools that successfully serve a cross-section of children stabilize housing and become a focal point for community life.[76] As our study indicates, however, the elementary and high schools in the majority of Chicago neighborhoods are abject failures in meeting their bottom-line obligations; they are viewed by many as dumping grounds for children who can't be educated.

Major Improvements Are Possible

What is so frustrating about the failure of the Chicago Public Schools and the lack of any potent effort to improve them is that other cities and states are making basic changes in their schools and have already turned the corner in creating schools that work. Here are just a few examples of the types of reforms that are making a difference elsewhere.

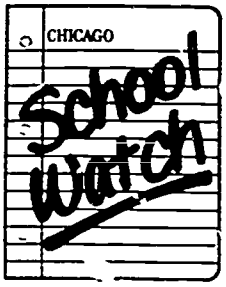
Example. Effective Schools Programs. Researchers have identified exceptional urban schools where low-income students are achieving at or above the national average in basic skills. And they've gone in and studied these "effective schools" to determine what makes them work. They've come up with a surprising amount of agreement about what the key ingredients of an effective school are.[77] Most effective schools, for example, have energetic principals who spend much of their time in the classrooms actively coordinating their school's instructional program for children, a strong but fair discipline program, and a pervasive belief among teachers that they can teach almost every child to read.[78] In Table 20, we've reviewed the research about effective schools to identify ten ingredients that are needed in an urban school where students learn to read at or above the national average.

In cities like Hartford, Connecticut, Milwaukee, Wisconsin, and St. Louis, Missouri, for example, serious efforts are now underway to help local schools make these ingredients of effectiveness a reality in the day-to-day activities of principals and teachers.[79]

(Chicago has its own official effective schools program.[80] However, this program exemplifies the lack of serious follow-through that, as discussed later in this section, repeatedly undermines efforts to improve Chicago's schools. Based on investigations by observers who have visited a number of schools that are allegedly carrying out the effective schools ideas in Chicago, the actual school-level and classroom-level activities that have been supported by Chicago's effective schools program bear almost no resemblance to the basic changes in educational practice that have been identified in the effective schools research.)

Example. The Boston Compact. The Boston Public Schools have reached an extraordinary set of agreements aimed at stimulating basic improvements in Boston's schools -- including one agreement with Boston's business community and one with Boston's colleges and universities.[81] For its part, the school system has committed itself to make measurable improvements in student achievement, graduation rates, attendance, and preparation for employment and further education. One key aspect of the school system's reform activities is to develop and carry out school-level plans aimed at achieving these improvements.[82]

Table 20



TEN KEY INGREDIENTS THAT CAN MAKE YOUR SCHOOL EFFECTIVE

1. PRINCIPAL IS EDUCATIONAL LEADER. The principal provides strong leadership and works toward clear educational goals for the school.

2. SAFE ATTRACTIVE SCHOOL. The staff creates an atmosphere in the school that is orderly, safe, serious, and attractive -- without being oppressive.

3. PARENTS WORK TO IMPROVE THE LEARNING PROGRAM. Parents involve themselves in improving the educational program, and the school welcomes parent participation and responds to parent concerns.

4. STAFF BELIEVES STUDENTS CAN LEARN. The principal and teachers firmly believe that their students can learn as well as anybody, and they work hard to make that happen.

5. LEARNING TO READ IS THE HIGHEST PRIORITY. The school staff defines learning to read in its broadest sense as the school's number one priority, and uses all school subjects and resources to make sure that this happens.

6. STUDENT TIME IS SPENT MOSTLY ON LEARNING ACTIVITIES. School schedules and day-to-day practices of all school staff help children spend as much time as possible actively involved in learning activities.

7. FREQUENT CHECKS OF STUDENT PROGRESS. The principal and teachers check frequently to see how well children are learning, and use this information to make the educational program more effective.

8. STAFF DEVELOPMENT IS TIED TO SPECIFIC SCHOOL GOALS. Staff development programs help teachers achieve the priority educational goals for the school.

9. SPECIAL PROGRAMS ARE CAREFULLY DESIGNED. Special programs (bilingual education, special education, Title I, and so on) are of high quality, are carefully matched to student needs, and are coordinated closely with the overall learning program of the school.

10. STAFF PROMOTES HIGH STUDENT ATTENDANCE. The school makes serious efforts to combat truancy and dropout.

The business community has, in return, virtually guaranteed a good entry-level job to any graduate of the Boston Public Schools with adequate levels of basic skills achievement. And businesses have placed job counselors in individual schools who provide a link with future full-time employment through offering students summer jobs and part-time jobs during the school year.[83]

In their compact with the school system, Boston's colleges and universities have focused on increasing the percentage of Boston high school students who enter and graduate from their institutions. Through the Boston Compact, they provide college counseling to high school students, send Boston high school graduates who are attending their colleges back to their old high schools to work with students, and provide retraining for high school teachers in such areas as science and writing. They are also studying why such a low percentage of Boston high school graduates who enter their colleges end up graduating.[84]

Initial evaluations of the Boston Compact indicate that student attendance and achievement have improved substantially and that major changes have taken place in the educational programs of a number of local high schools. The business community has met its goals for providing jobs to Boston graduates and, to date, has offered more jobs than there were students to take them.[85]

Example. California School Improvement Program. The State of California took seriously the need to make sure that education actually improves at the school level and that reform plans aren't just put on paper and then forgotten. The California School Improvement Program puts power and money in the hands of the teachers, parents, and others who know their local school best and have the most immediate stake in its success. Individual California public schools can join the School Improvement Program by forming a School Site Council consisting of parents, teachers, school administrators, students, and concerned citizens. This council then conducts a systematic evaluation of their school to determine its strengths and weaknesses. Based on this evaluation, the Council develops a three-year plan for improving the school. The state gives $80 per pupil to the local school to carry this plan out. In carrying out this improvement plan, the School Site Council can use these funds for additional teachers or teacher aides, staff retraining, joint parent-teacher training sessions, etc. Teams of parents and educators from other school systems visit local schools involved in the program to review their progress. An independent research study of the School Improvement Program indicated that it brought about substantial improvements in hundreds of participating schools.[86]

There is no reason why these and dozens of other good ideas that are actually working in many other cities and states can't be adapted to solving Chicago's educational problems. Chicago's record of school failure is not inevitable. But if we don't learn from other cities and

states, who are incidentally our competitors in the marketplace, the decline of our city and its neighborhoods will continue. Commenting on Chicago's economic position relative to our competitors, the Commercial Club study comments that ". . . metropolitan Chicago has been walking while much of the country has been running." The same comparison precisely fits the condition of the Chicago Public Schools. The city's future depends on our ability to succeed now in changing a school system that has thwarted so many who have tried to improve it.

A Quality Schools Agenda for Chicago

Based on our detailed analysis of the strengths and weaknesses of the Chicago Public Schools and of practical tested ways to improve them that have proven their worth in other urban school systems, Designs for Change recommends a ten-point Quality Schools Agenda for Chicago:

1. Parents Organize to Improve Their Local Schools

Regardless of the actions taken by others, concerned parents and citizens should organize on a school level and commit themselves to a long-term struggle for needed improvements in their local schools. The ingredients of an effective school should form the basis for these campaigns.

2. Four Clear Goals for the School System

The school system should adopt the following top priorities: (1) improving basic skills in reading, writing, and mathematics, (2) increasing the graduation rate, (3) increasing students' access to the job market, and (4) increasing students' access to higher education. The school system should methodically measure policies, expenditures, and staff performance against these priorities.

3. Non-Selective Schools Get Top Priority

The school system should put its money and energy into improving non-selective schools that serve a broad range of students. Special emphasis programs should, with few exceptions, admit students by lottery. The school system should reverse the development of special schools and programs that serve a select few.

4. Make Each Local School an Effective School

The school system should focus on the local school as the key unit in the school system where education either succeeds or fails. The touchstone for judging whether the school system is moving towards its top priorities should be whether appropriate changes are taking place in the day-to-day operation of individual local schools. The school system should make the ingredients of an effective school, based on the effective schools research, the major focus for improving each Chicago school.

5. Power and Resources for Local School Improvement Councils. State Support for a School Improvement Program in Chicago.

The school system should carry out a structured School Improvement Program, in which substantial authority over funding, curriculum, and staffing is delegated to local School Improvement Councils, composed of parents, teachers, the school principal, and others who have a stake in the school's success. The State Legislature should pass special legislation for Chicago that allocates substantial funds directly to these Councils.

6. Basic Changes in the Bureaucracy

The school system should put reform-oriented leaders in key administrative positions and should create a new system of incentives for administrative staff, so that they are held accountable for helping local schools to improve.

7. A Compact with Chicago's Business Community

The school system should negotiate a Chicago Compact with Chicago's business community, in which the school system agrees to make major reforms to improve basic skill achievement and graduation rates that are part of the Quality Schools Agenda and, in return, the business community gives a hiring preference to Chicago Public Schools graduates with good basic skills.

8. A Compact with Chicago's Higher Education Institutions

The school system should negotiate a Chicago Compact with higher education institutions in the Chicago area, in which each side agrees to concrete steps to increase access to higher education for school system graduates.

9. Replace Mastery Learning

The school system should commission an independent panel of experts to evaluate its Mastery Learning curriculum in reading and mathematics and alternatives to this program. If this panel substantiates the record of failure for this program indicated by the ninth grade reading achievement results, Mastery Learning should be replaced with a more appropriate strategy for instruction.

10. Dramatically Expand Early Childhood Education

The State Legislature should insure that all-day kindergarten is available to all interested families and that all-day preschool education for three- and four-year-olds is available to all interested low-income families. The state should fully fund these programs.

The Quality Schools Agenda represents a realistic approach to saving Chicago's failing public schools. We urge members of the Board of Education, committed teachers and administrators, concerned parents, concerned business people, elected officials, and others who want Chicago to survive to consider this Quality Schools Agenda as the focus for reforming our school system.

If it is carried out, the Quality Schools Agenda can overcome a set of barriers to reform that we have observed repeatedly in the Chicago Public Schools. These four key barriers are described and illustrated below. After analyzing these barriers, we elaborate on each of the ten points in the Quality Schools Agenda, explaining why they will bring substantial improvements to Chicago's 592 local schools. Finally we describe immediate actions that key groups can take to begin carrying out the desperately needed improvements in our schools that form the Quality Schools Agenda.

Four Key Barriers That Must Be Overcome

Those who want to improve the Chicago Public Schools must adopt a new way of thinking about how to have a major impact on them, because the school system as an institution has developed enormously powerful mechanisms for undermining attempts to improve it. The Quality Schools Agenda is based on a clear analysis of why Chicago's schools have failed to improve in the past and what can be done to overcome the school system's resistance to change. Below, we analyze four key barriers that must be overcome if we are to have an effective educational system in Chicago.

Barrier 1. Two-tiered school system. In the last five years, the school system has put in place a two-tiered school system of selective and non-selective schools and programs, in which the majority of the students, who are consigned to the system's lower tier, are viewed by many as uneducable. This two-tiered system reinforces the belief among school staff that high dropout rates and low reading achievement are inevitable, because most Chicago public school students come from poor and minority families and neighborhoods.

It is tragic and ironic that one of the few "reforms" that the Chicago Public Schools has actually carried out over the past five years has put in place a two-tiered system of education that robs the majority of Chicago students of a chance for a decent education and that weakens Chicago's neighborhoods. It is doubly ironic that this two-tiered system has been set up under the banner of school desegregation.[87]

Historically, Chicago has operated a two-tiered educational system that has segregated students based on their race.[88] Recent reform activities in the school system, carried out primarily as part of the school system's desegregation program, have allegedly been aimed at removing these inequalities. However, the centerpiece of these reform activities has been the creation of scores of special schools and programs called Options for Knowledge, many of which have selective entrance criteria.[89] Extra resources and the best teachers are being transferred to these programs. There is, in fact, no effective central oversight as to whether the student selection criteria for these programs are appropriate.[90] Middle-income parents and those with influence have learned how to navigate the complex formal and informal procedures needed to get their children into these programs, while lower income parents lack this knowledge. The school system has, in effect, modified a system where students were segregated into two groups simply by race into a system where students are segregated into two groups based on a combination of tested achievement, behavior, race, and family income level.[91]

Even when students are successfully enrolled in selective programs, program staff frequently feel little need to make adjustments for the the child who exhibits behavior or learning problems. Until a recent change in policy, "problem children" in selective programs were threatened with transfer back to their non-selective neighborhood schools and could easily be shipped out if they didn't shape up.[92]

Meanwhile, the non-selective neighborhood schools that enroll the great majority of Chicago's students (especially those schools serving minority neighborhoods) have come more and more to be viewed as dumping grounds for children who can't be educated. Rather than promoting the belief that all children can learn, the growth of selective programs in the school system reinforces the view that the majority of Chicago's poor and minority children are uneducable and that the best we can do is to "save a few." Through the proliferation of selective programs, the Chicago school system is turning away from the basic American ideal of equal educational opportunity. The harm being done to children as a result is graphically reflected in the reading scores and dropout rates in Chicago's segregated schools presented in this report.

Options for Knowledge is a perversion of a valid educational idea: that schools with distinctive course offerings or educational philosophies can provide a learning experience that matches students' interests or fits with parents' preferences for their children's education. Schools and programs with a special philosophy or program emphasis do not have to be selective. For example, when the school system's Metro High School was originally established, 4,000 students from all over the city applied for 150 places in the school. The students who attended Metro High School were then selected through a random lottery.[93] Similarly, the Disney Magnet School has attracted a diverse student body over a period of years through a lottery selection

method.[94] Hundreds of other successful magnet school programs across the country capitalize on student interests in human service careers or art, or parents' preferences for a more structured or less structured school program, yet serve a broad cross-section of students.[95]

There is a valid role for a few academically selective schools and programs in a large urban school system, if these programs can demonstrate a strong positive impact on their students.[96] However, with a few exceptions that are carefully justified, special emphasis programs should admit students by lottery from among interested applicants, and the curriculums of such schools and programs should be geared to serve a cross-section of interested students. They should not be elite private schools operating at public expense.

Contributing to Chicago's two-tiered approach to education is the failure of the elementary schools to teach the majority of children to read well, a failure underscored by our analysis of ninth grade reading achievement data. As children move into the later elementary grades and into high school, the fact that so many of them have not been successfully taught their basic skills heightens the tendency of school system staff to sort out the "winners" and the "losers" and to put them either in the small upper tier of selective programs that are part of Options for Knowledge or in the large lower tier of non-selective ones. The end result of this process is reflected graphically in the statistics presented in this report about the failures of Chicago's segregated non-selective elementary and high schools.

The growth of Chicago's two-tiered school system has reinforced a long-standing belief held by many school system staff members that the schools can have little impact on most of Chicago's poor and minority children. In commenting on the Hispanic dropout rate in Chicago, for example, the principal of one school recently told the press, "If I can

get 30 percent of them across the stage on graduation day, it's a lot."[97] A teacher in a predominantly black high school where the drop-out rate exceeds 70% told a reporter, "We lose all the dregs by the second year. They all drop out."[98]

Imagine the reaction in a suburban community, even one with a substantial minority student population like Evanston, if a high school principal said that a 70% dropout rate was inevitable or if a teacher publicly referred to more than half the school's students as "the dregs." Yet many educators in Chicago feel comfortable in making statements like these, because such statements reflect the views of a substantial portion of their colleagues and there are no real consequences for holding and acting on these beliefs.

Those Chicago educators with a commitment to educate all children feel outnumbered and demoralized by those who believe that the best they can do is to "save a few" through the school system's selective programs. Yet the most careful research that has been done on the effects of tracking by achievement indicates that it fails to deliver on its alleged benefits. A national study of John Goodlad indicates that when students are tracked based on achievement, those in the low groups receive inferior education. However, when low-achieving and high-achieving students are taught together, the high-achieving students are not harmed and the low-achieving students benefit.[99]

Recent research aboout effective urban schools (discussed earlier) has consistently shown that an absolutely basic ingredient for an effective school is a belief among staff members that all students can learn and that it is within power of school staff, despite problems created by students' backgrounds, to keep students in school and to teach them to master basic skills.[100] When educators begin with this positive belief, they keep trying new ways to reach students. And they strive to get

around bureaucratic road blocks so that they can set up effective learning programs. However, when educators believe that most of their students can't learn, this becomes a self-fulfilling prophecy, a powerful negative force that undermines efforts to improve the schools[101].

A report on Chicago's dropout problem prepared in 1981 by the school system's own "Special Task Force to Reduce Dropouts" eloquently describes this basic problem:

> Quite candidly, however, even as we pursued our task, there existed a prevalent and pervasive cloud of apprehension and pessimism, doubt and concern, regarding our perception of the Board's ability and willingness to properly consider our recommendations and make the necessary commitment in attitude, resources and time that it's going to take to confront the dropout problem. We are concerned about the complacent and indifferent attitude and lack of initiative that seems to exist on the part of some school board members, administrators, district superintendents, principals, and teachers. . . .[102]

Barrier 2. "More of the same" mentality. Plans for reform are typically not focused on changing the core process of teaching and administration in local schools, but are based on grafting additional staff and programs into the existing structure. This "add-on" approach reinforces the view that there is nothing wrong with the school system but a lack of resources and that without additional resources no improvements are possible.

A recent television special and related Chicago Reporter article about South Shore High School provided graphic examples of the inadequacies of Chicago high school education, such as teachers not properly trained to deal with remedial reading problems, acquiescence of school administrators to widespread student absenteeism, and a lack of coherent teamwork and planning within the high school's academic departments (English, science, etc.).[103] This journalistic investigation forcefully illustrated that a major problem with the Chicago Public Schools is its poor use of its existing resources. Dollars are not being translated into effective learning programs, as the cost analysis presented in

Section 3 dramatically illustrates. Yet when reforms are proposed by the school system's leadership, they characteristically do not address existing shortcomings in the use of resources. The solution to most problems is more of the same:

- o If too many students are dropping out, add more attendance teachers. But don't change the flawed systems for reporting attendance and dropout data. And don't question whether some staff members are creating roadblocks that push students out of school.

- o If students are not learning to write, require more English courses and hire more English teachers. But don't analyze and correct the weaknesses of English teachers already teaching and the adequacy of high school English department heads who are supposed to coordinate the English program.

One frequent result of the add-on mentality in Chicago is that school reform projects end up creating additional positions for non-teaching coordinators, supervisors, resource people, and the like. Because there is no real commitment in most Chicago reform projects to help the teachers who work directly with children to do things differently, these new non-teaching jobs typically represent money wasted. They create more bureaucracy in the home of reform.

Paradoxically, despite such evidence of waste, there is also evidence that the school system needs more money. Class sizes of forty in some schools, lack of supplies, and a chronic shortage of funds for substitute teachers, for example, all point to this need.[104] But unless the school system makes fundamental improvements in its use of existing resources, more money will not help. It will only buy more of the same.

Barrier 3. No leadership to see that reforms are carried out. Most reform efforts that are initiated in the Chicago Public Schools fail to confront well-known bureaucratic obstacles that keep these programs from having a positive impact on students' learning experiences. Chicago reform projects are typically designed and carried out in a manner that guarantees their failure.

The Chicago Public Schools is a giant bureaucracy that includes 592 local schools, twenty administrative districts that each have a substan-

tial staff, and over 140 divisions, bureaus, and departments that make up the central administration (see Table 21). Within this giant bureaucracy, a major continuing problem is a breakdown of coordination between the central administration and the educators who work with children in the 592 local schools.

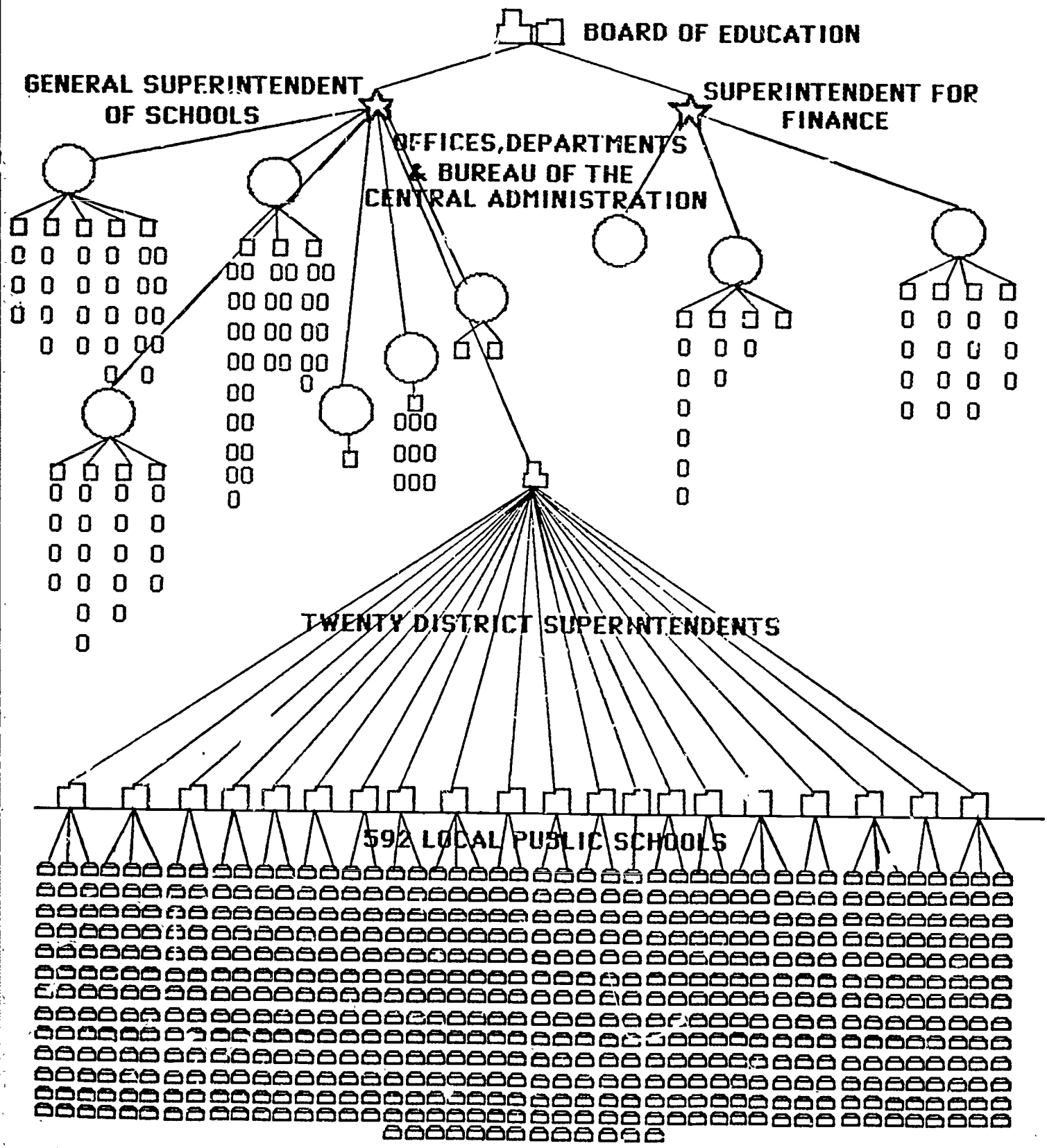
Because many educators within the system don't believe that the schools can be improved substantially (including many in leadership positions), they accept the written and unwritten rules of the system as unchangable and devote most of their energy to coping with the immediate problems of this "real world." When you follow the principal of a Chicago high school around for a day, you find that the principal's time is absorbed with reacting to one short-term crisis after another (a fight in the school, a shortage of history books, a deadline for submitting a report to "downtown"); no energy is devoted to long-term projects to make the school better, although research shows again and again that the principal must provide the leadership for school improvement.[105]

The reform plans that come from downtown are not conceived or followed through in a way that connects with the real world of the local school. Reforms exist in a "paper world" that is almost totally separate from the "real world" of Chicago's 592 local schools. Year after year, plans for improvement are released with much fanfare, but they end up having almost no beneficial impact on the day-to-day experiences of students.

> Example. In response to periodic bursts of public concern about the dropout problem, the school system set up task forces to analyze the problem and make recommendations for action in 1976, in 1981, and then again in 1984.[106] There is no evidence of a serious attempt to carry out the recommendations of any of these task forces. Typically, such task force activities function not as blueprints for change, but rather as public relations devices that diffuse criticism and protect the real world of the schools from changing.[107]

Table 21

The Structure of the
Chicago Public Schools



Even when plans for reform are taken somewhat more seriously, however, they are designed and carried out in a way that insures their ineffectiveness. These continuing failures result from several shortcomings that have become apparent to us as we have carefully analyzed what happens at the school and classroom level when new directives for reform arrive from downtown.

School-Level Realities Are Ignored. Reform efforts are not based on a clear analysis of how best to carry out the change at the school level. One of the clearest lessons of recent research about school reform is that the reform process either succeeds or fails at the school level. The school is the key social unit that must be altered if meaningful improvements are to occur, and the commitment of the staff of each local school is essential.[108] Yet reform programs in Chicago are almost never based on a clear understanding of what impact a reform will have at the school level, what extra training and resources need to be provided to make it work, how it will conflict with established ways of doing things, and how these barriers can be overcome.

> Example. The High School Renaissance Program mandated that students take additional typing and science courses, but no coherent effort was made by the central administration to see that the needed typewriters and lab equipment were available in the schools. Special remedial courses were also mandated, but many schools did not receive the staff to teach these courses until well into the school year.

Top Administrators Don't Coordinate Their Work. Multiple and often contradictory projects emanate from the top of the system, with no overarching plan that links them and no consistent administrative follow-through that gives overall coherence to these contradictory projects Various "downtown" departments frequently initiate new programs without effective planning and communication among them. As one

principal told us, "I get so many different signals from downtown. If they would just tell me what the top priorities are, I could really concentrate on them." The staff in local schools often lack a clear message about what, in actual fact, their real priorities are and which of the directives from the top to take seriously. Reform projects are often short-term, and new ones quickly take their place.

> Example. The funding for a major state-funded program to provide extra staff in low-income schools (State Title I) was severely cut back in 1983-84, and many school-level activities funded by this program were dropped in local schools. At the same time, new special programs were being started in many of the same schools using school desegregation funds. With a little planning, the two departments responsible for State Title I and for desegregation activities could have transferred good programs from one funding source to another. However, there was no effective coordination between the two departments, and thus maximum disruption in local schools.

Such turmoil leads to confusion and cynicism in the schools, as some staff struggle to make sense of this disorganization so it won't harm their students and others cite the multiplicity of reform projects as evidence that none should be taken seriously.

Paper Compliance. Even when there is some pressure for implementation from the top, "paper compliance" is often the major form of administrative oversight.

> Example. As the investigation of South Shore High School documented dramatically, there is little relationship between actual classroom attendance at South Shore and the school's official attendance statistics.[109] Yet when the school system's leadership places emphasis on improving attendance, this concern is translated into an effort to boost the official statistics. When these attendance statistics go up, administrators at all levels take credit for "improving the attendance problem," even when no actual improvement has taken place.

The school system's leadership fails to carry out sufficient local monitoring to distinguish between paper compliance and real improvement.

A paper compliance approach encourages superficial changes that do not benefit children, as well as the misrepresentation of results in

reports to superiors (for example, the manipulation of achievement test results).[110] And when educators who make an honest effort to carry out a change see that those who merely comply on paper are rewarded, they become cynical about the reform process. As one teacher told us, "You can't get in trouble in Chicago for not teaching children, but you can get in trouble for not turning in a form on time."

No Say at the School Level. School-level staff seldom have any say in formulating reform plans or in deciding how these plans will be carried out. Major reform packages, such as Mastery Learning, are frequently presented as highly detailed "teacher proof" programs that allow no adaptation or creativity at the local level. Lacking any role in developing reform plans, school staff either resist plans for change or implement them mechanistically.

Barrier 4. The public has no voice. Parents, business people, and other consumers of the school system's services are repeatedly blocked from having a meaningful role in improving the schools.

In communities that have good schools, a key ingredient that is repeatedly found is that the public watches carefully over the operation of their school system from top to bottom and has an effective voice in how the schools are run.[111] Chicago's suburbs include some of the best schools in the country, and these excellent schools are constantly subjected to public scrutiny and accountability in a variety of formal and informal ways.

Yet in Chicago, the schools are almost totally insulated from such public accountability. As pointed out earlier, one highly visible sign of this lack of accountability is the readiness of many educators to express their negative views about the potential of the majority of

their students. Another is the continuing charade in which plans for reform are announced to the public with great fanfare, yet when they are not carried out in a way that benefits children, there is no accountability for failure.

Key public constituencies with a vital stake in the effectiveness of Chicago's schools, including parents, business people, and local citizens' organizations, are consigned to a passive inconsequential role in the school system. Local School Advisory Councils, which are supposed to be the parent and community voice in the school system, are often under the thumb of the school principal, and their official mandate allows them little voice in important school decisions. Individual parents are consigned to picking up their children's report cards, and this modest activity is repeatedly hailed by the school system leadership as a major stride in parent involvement. But when individual parents or parent groups begin to ask questions about a school's reading scores or dropout rate or budget, they encounter evasion and hostility.

Similarly, the business community, which has shown a strong commitment to improving the school system, is frequently channeled away from the hard issues about what is wrong with Chicago's schools and how we can improve them. Businesses are encouraged to conduct Adopt-A-School programs that benefit a few students, but the businesses involved are not encouraged to ask basic questions about their adopted school's reading achievement, quality of leadership, or staff effectiveness.

Directions for Genuine Reform: A Quality Schools Agenda for Chicago

The Quality Schools Agenda for Chicago grows from a realistic assessment of the barriers to change just described. The Agenda's proposals are realistic because they are based on successful efforts to confront these same problems in other large urban school systems.

One major lesson from these other cities is that large urban school systems don't have the capacity to reform themselves without a major sustained push from the public. The public and its representatives must be the catalyst for change. They must be active at each key level of the educational system from the state legislature down to the local school. If they take aggressive steps now, concerned parents, business people, legislators, school board members and other citizens can work closely with committed educators to overcome the barriers just described and bring about the major changes needed.

A second major lesson from other cities and states is that the individual local school is the key unit in the school system where the process of change either succeeds or fails. A good urban school has strong leadership, teamwork and high morale among teachers, and an active partnership between the school's staff and parents. In schools with these qualities, reform plans take root and talented teachers find support rather than frustration. Every aspect of the Quality Schools Agenda focuses in some way on strengthening the capacity of individual local schools to teach children better.

Below, we briefly describe each of the ten points in the Quality Schools Agenda, explaining why each of these recommendations should be a crucial part of a campaign to save Chicago's failing school system.

1. Parents Organize to Improve Their Local Schools

Regardless of the actions taken by others, concerned parents and citizens should organize on a school level and commit themselves to a long-term struggle for needed improvements in their local schools. The ingredients of an effective school should form the basis for these campaigns.

Regardless of what actions others take, the quality of individual local schools will probably not improve much unless parents and citizens are willing to organize a group committed to change their local school,

learn about the ingredients of an effective school, go into their local school and see whether it actually has these ingredients, and then push over a period of years to see that the needed ingredients become a day-to-day reality. Chicago SCHOOLWATCH, a long-term project of Designs for Change, focuses precisely on giving parents and citizens the skills and the advice that they need to press for real improvements in this way.

Even if all the other changes in policy that we are advocating are put in place, few local schools will improve unless parents and citizens are willing to commit themselves to this long-term reform struggle. For example, if the school system sets up School Improvement Councils, parent participation in them will probably amount to no more than window-dressing unless parents and citizens gain the skills and the staying-power to insure that they are equal partners in the school improvement process.

2. Four Clear Goals for the School System

The school system should adopt the following top priorities: (1) improving basic skills in reading, writing, and mathematics, (2) increasing the graduation rate, (3) increasing students' access to the job market, and (4) increasing students' access to higher education. The school system should methodically measure policies, expenditures, and staff performance against these priorities.

For a large bureaucratic organization to improve, it must have a limited set of goals that are the constant touchstone when its staff makes large and small decisions on a day-to-day basis.

Given the crisis situation underscored by this report and the historic inability of the school system to follow through when it develops a plan for making changes, the school system must focus on achieving a limited set of bottom-line goals. As discussed in Section 1, we must at the minimum hold the school system accountable for helping

students to master essential skills in reading, writing, and mathematics, and to complete high school. At the same time, through its own actions and through its collaboration with other key institutions, the school system must increase students' access to the job market and to higher education.

Of course, setting goals is easy. The crucial next step is to measure policies, expenditures, and staff performance against these goals. For example, shortly before this report was released, the head of the Bureau of Dropout Prevention released data about high school dropout rates, but he admitted that dropout rates for many individual schools are probably inaccurate, an observation that the present report shows is correct.[112] A school system committed to achieve the goal of reducing dropouts would not tolerate the compilation and reporting of such inaccurate statistics.

The other points in the Quality Schools Agenda define a realistic program for moving toward the four basic goals that we have recommended.

3. Non-Selective Schools Get Top Priority

The school system should put its money and energy into improving non-selective schools that serve a broad range of students. Special emphasis programs should, with few exceptions, admit students by lottery. The school system should reverse the development of special schools and programs that serve a select few.

Chicago's economy and Chicago's neighborhoods will not survive if the best that the school system can do is to save a few students through a handful of special schools while the rest of the schools continue to produce the massive level of failure documented in this study.

The ideal Chicago elementary school or high school must be viewed as a school that serves students with a spectrum of abilities effectively. Such diverse schools can either be neighborhood schools or schools with a special emphasis that admit students through a lottery.

With a few carefully justified exceptions, public schools should not restrict admission based on past achievement, attendance, etc. As discussed above, there are many examples of high quality schools in Chicago and elsewhere that have a distinctive educational philosophy or curriculum but have an open admissions policy. And there is clear research evidence that classes and programs that admit students with a range of past achievement help low-achieving students and do not hurt high-achieving students.[113] The school system must make its top priority improving the educational program in non-selective schools. When the school board makes decisions about priorities, the most capable leaders, the best teachers, the additional funds, etc., should be focused on strengthening these non-selective schools.

4. Make Each Local School an Effective School

The school system should focus on the local school as the key unit in the school system where education either succeeds or fails. The touchstone for judging whether the school system is moving towards its top priorities should be whether appropriate changes are taking place in the day-to-day operation of individual local schools. The school system should make the ingredients of an effective school, based on the effective schools research, the major focus for improving each Chicago school.

As discussed earlier, Chicago's plans for school reform continue to fail because the leadership needed to overcome well-known bureaucratic obstacles to change is seldom forthcoming. Meanwhile, there has been a revolution in thinking about school improvement strategies in much of the rest of the country.

In Chicago, public attention related to the schools focuses primarily on what happens at the top of the system -- who the superintendent is, what policy positions are taken by the school board. These issues are important. However, a flood of research and practical experience indicates that the single most important place to focus attention is not on what happens "downtown," but on what happens in

individual local schools. The process of reform either succeeds or fails at individual local schools. If a local school has the ingredients of an effective school, it can bring about dramatic measurable improvements in its ability to hold its students and to teach them essential skills. As explained earlier, there is now compelling evidence that urban schools can teach almost every child to read, and researchers have identified key ingredients of these effective schools, which are summarized in Table 20. Making these practices a living reality in each Chicago school is key to saving the school system.

Notice that while making the schools more effective will require more money, the needed reforms also require basic changes in the way the schools use their existing resources. For example, the principal of an effective school needs to spend less time on paperwork and more time in the classroom observing teachers. The school staff must welcome and encourage meaningful parent involvement, rather than resisting parents. Teachers must not only administer reading tests, but use the tests to plan the next steps in teaching individual students. Principals must insure that scarce time for staff training is focused on the school's overall plan for improvement, and is not just a grab bag of workshops and lectures. Each local school must ask two questions simultaneously:

- What can be done with existing resources to make this school more effective?
- What can be done with additional resources to make this school more effective?

As discussed earlier, the school system already has an Effective Schools Program on paper that resembles the program we are describing. When you take a close look at the official Effective Schools Program as it is being carried out in local schools, however, this program illustrates all the barriers to change in Chicago that were discussed above. The basic concept behind the effective schools research is that there

must be fundamental improvement in the core process of teaching and learning in each local school. As Chicago's program has moved from plan to reality, it has been transformed into a series of add-on activities -- such as summer school, after school programs, and field trips -- that leave the day-to-day process of instruction virtually unchanged.

5. Power and Resources for Local School Improvement Councils. State Support for a School Improvement Program in Chicago.

The school system should carry out a structured School Improvement Program, in which substantial authority over funding, curriculum, and staffing is delegated to local School Improvement Councils, composed of parents, teachers, the school principal, and others who have a stake in the school's success. The State Legislature should pass special legislation for Chicago that allocates substantial funds directly to these Councils.

The top leadership of the school system must set a limited set of system-wide goals and define some key directions that are needed to achieve these goals. We have already suggested four straight-forward goals for the school system, and we have recommended that the effective schools research form the basis for defining key directions for change.

However, top leadership must also recognize that it is not desirable to specify in minute detail every step that should be taken to improve a local school. Meaningful improvements will take place in individual local schools only if specific plans for improvement are worked out at the school level. Teachers, parents, and others with a stake in each local school must have a share of the power to decide how their local school will improve. For example, the school system's leadership should expect each school to develop a fair clear discipline code that is communicated effectively to parents, students, and staff. But many of the specifics of such a code and how it will be carried out should be worked out at the local school by those who will have to live by it.

A basic change in the way decisions are made must take place in the school system, with a major shift of power and resources to individual local schools. As a key part of this change, the school system should initiate a structured School Improvement Program, modeled on the highly successful California School Improvement Program. Based on experiences in California and elsewhere, the key elements of an effective School Improvement Program are the following:

- o The school system agrees to delegate substantial authority over curriculum, staff, and funds to the local school level.
- o The school system establishes a School Improvement Council in each school, composed of the principal, teachers, parents, community representatives, and students (teachers selected by teachers; parents selected by the Local School Advisory Council).
- o The School Improvement Council assesses the strengths and weaknesses of their school in light of the ingredients of an effective school and develops a School Improvement Plan. The plan specifies changes that can be accomplished with existing resources and changes for which additional resources will be needed.
- o The School Improvement Council receives a substantial per pupil allocation to help them carry out their plan.
- o The principal then oversees the implementation of the plan with monitoring and assistance from the School Improvement Council.
- o The School Improvement Council assesses how well the plan is being carried out and makes subsequent plans for improvement based on this analysis.

As discussed earlier, a similar process has brought about major improvements in hundreds of schools in California, and similar projects have met with success in Boston, New York, and other large cities.[114] Shifting real authority and control over spending down to the school level is one of the best ways to overcome the barriers that keep Chicago's school system locked into its present patterns of failure.

To support this school improvement process, the Illinois State Legislature should pass special legislation for Chicago that stipulates how local School Improvement Councils should be set up in Chicago Public

Schools and what their powers should be. Further, this legislation should allocate $100 per pupil to be used by School Improvement Councils that develop an appropriate improvement plan.

6. Basic Changes in the Bureaucracy

The school system should put reform-oriented leaders in key administrative positions and should create a new system of incentives for administrative staff, so that they are held accountable for helping local schools to improve.

When major improvements have occurred in other cities, top leadership has been willing to shake up the bureaucracy. Strong school boards and superintendents have appointed reform-minded leaders to key positions, drawing them from both inside and outside the school system. Formal and informal barriers to hiring qualified outsiders have been eliminated. Chicago must follow this example.

There are many educators within the school system who have both the skills and the commitment to assume these leadership positions. In addition, there are many proven educational leaders from elsewhere who should be enlisted in this reform process. The Chicago Public Schools has one of the highest administrative salary scales of any large school system in the country. To put capable leaders in key positions, the school board must eliminate barriers that hinder top candidates from outside the system from competing for key jobs.

Beyond selecting the right people for key administrative positions, the school system's top leadership needs to institute a drastically different system of incentives so that its administrative staff members aid the process of local school improvement. The school board has recently adopted a merit pay system for administrators. Merit incentives should be clearly tied to each person's effectiveness in aiding the process of school change, with local school staff and School

Improvement Councils playing a significant role in the evaluation of those within the bureaucracy who have an obligation to help their local school.

Another step that the school system's leadership should take in changing the incentive system is to require various coordinators, resource people, facilitators, etc., who are supposed to be helping local school staff to improve, to spend a portion of their time teaching students, so that they are in touch with realities of local schools and so that they can demonstrate new methods in practice.

7. A Compact with Chicago's Business Community

The school system should negotiate a Chicago Compact with Chicago's business community, in which the school system agrees to make major reforms to improve basic skill achievement and graduation rates that are part of the Quality Schools Agenda and, in return, the business community gives a hiring preference to Chicago Public Schools graduates with good basic skills.

Judging from the initial success of the compact between the Boston Public Schools and Boston's business community, as described earlier, Chicago's business community can provide a powerful incentive for the public schools to improve. For Chicago's economy to survive and flourish, Chicago's schools must produce well-prepared graduates. To produce well-prepared graduates, Chicago's schools must make the types of basic school-level changes that are spelled out in the Quality Schools Agenda.

Through a formal agreement with the school system, the business community should gain detailed commitments for school-level reform in the Chicago Public Schools. In return for these basic changes, the business community should agree to give a hiring preference to Chicago Public Schools graduates who meet their job qualifications, so that these students can gain access to entry level jobs that provide real opportunities for advancement.

Providing such access to the job market can provide a dramatic incentive for students to stay in school and to master basic skills, for local schools to improve their performance, and for school system leadership to hold up their end of the bargain made in a Chicago Compact with the business community.

8. A Compact with Chicago's Higher Education Institutions

The school system should negotiate a Chicago Compact with higher education institutions in the Chicago area, in which each side agrees to concrete steps to increase access to higher education for school system graduates.

Besides increasing access to the job market, a key goal of the Chicago Public Schools should be to increase access to higher education. A recent study of access to higher education in the Chicago area conducted by Gary Orfield of the University of Chicago presents a frightening picture of the current situation. Enrollment of Chicago's minority students in area colleges and universities with the highest standards is minuscule and has been declining.[115]

In attacking this problem, Chicago can also learn from the Boston Public Schools, which have negotiated a compact, described earlier, with Boston area colleges and universities. The Chicago Public Schools should negotiate a similar agreement, in which the school system commits itself to school-level improvements that will increase the preparation of their graduates for college, and the colleges and universities agree to increase the numbers of Chicago Public Schools graduates that they accept, while working with local schools to improve college counseling and to eliminate barriers to college enrollment.

9. Replace Mastery Learning

The school system should commission an independent panel of experts to evaluate its Mastery Learning curriculum in reading and mathematics and alternatives to this program. If this panel substantiates the record of

failure for this program indicated by the ninth grade reading achievement results, Mastery Learning should be replaced with a more appropriate strategy for instruction.

Data about the ninth grade reading achievement of Chicago public school students provides decisive evidence about the failure of Chicago's major strategy for teaching children to read: Chicago Mastery Learning Reading or CMLR. Based on our observations of this program in operation in the public schools and our interviews with teachers and administrators responsible for carrying it out, we conclude that the basic approach that lies behind this program is inconsistent with research about effective reading instruction and effective teaching.[116] Based on the available evidence, we conclude that CMLR should be phased out and that an alternative instructional plan should be put in its place.

Many staff members within the Chicago Public Schools have a strong professional stake in CMLR, since they have participated in its development and advocated its continued use. Thus, we recommend that an independent panel of experts evaluate the implementation and the effectiveness of CMLR and its counterpart for mathematics instruction, Chicago Mastery Learning Mathematics. The panel should also analyze alternatives to the present curriculum. If this panel substantiates the record of failure indicated by our results, Mastery Learning in reading and math should then be replaced with more appropriate instructional strategies.

10. Dramatically Expand Early Childhood Education

The State Legislature should insure that all-day kindergarten is available to all interested families and that all-day preschool education for three- and four-year-olds is available to all interested low-income families. The state should fully fund these programs.

One of the clearest conclusions of educational research over the past twenty years is that high quality early childhood education has a dramatic long-term effect on children in general and on low-income children in particular. In a careful study of the impact of preschool education, in which two groups of children were followed to adulthood, those low-income minority children who received good early childhood education achieved better in school, were less likely to end up in expensive special education classes, were less likely to be held back, more likely to be employed, less likely to be arrested, and less likely to become pregnant as teenagers.[117] Every $1 invested in early childhood education resulted in a subsequent savings of $7 to society.[118] When quality early childhood education can be provided on a full-day basis, with significant parental involvement in the programs, it can have major benefits in strengthening the family and avoiding future illiteracy. A dramatic expansion of early childhood education for Chicago's children is one proven way to help the school system meet its bottom-line goals.

The State Legislature should fully fund programs to insure that all-day kindergarten is available to all interested families in Illinois and that all-day preschool for three- and four-year-olds is available to all interested low-income families.

Immediate Action Is Essential

The present moment can be seized as an opportunity to make basic improvements in Chicago's schools that can begin to reverse the damage that the system is doing to our children's future and to the future economic well-being of the city.

The Chicago Board of Education and the incoming General Superintendent, the Mayor, the business community, concerned parent and citizen groups, Chicago teachers and their representatives, and the Illinois

State Legislature can each take immediate steps to consider and act on the practical proven reform proposals that make up the Quality Schools Agenda.

Chicago Board of Education and
Incoming General Superintendent

The Chicago Board of Education is operating with low public confidence in its capacity to improve the schools. The Quality Schools Agenda presents a workable plan for reform through which the school board can demonstrate its commitment to basic reform. Among the points in the plan on which the Board of Education and the incoming General Superintendent can take immediate action are adopting a limited set of system-wide priorities, strengthening non-selective schools, focusing on individual local schools as the key to change, making the ingredients of an effective school the focus for school improvement, establishing a school improvement process that shifts substantial control to the school level, appointing reform-oriented leaders from inside and outside the system to key administrative posts, creating incentives for system administrators to aid school improvement, negotiating a compact with the business community, negotiating a compact with area universities, and initiating an independent review of the Mastery Learning program.

Further, as part of the school board's legislative agenda for the State Legislature, the board can support the funding of reforms with a proven record of effectiveness, including a school improvement program for Chicago and the expansion of early childhood education state-wide.

Concerned Parents and Citizens

As noted earlier, active informed parent and citizen groups are the single most important force needed to bring about real changes in individual local schools. Parent and citizen groups should not wait for others to act, but should take leadership in pressing for the Quality Schools Agenda to be carried out. Parents and citizens should work as organized groups to demand an explanation of reading achievement and dropout rates in their local schools, learn about the ingredients of an effective school, and press for these ingredients to become a reality in their local schools. Besides struggling for changes in specific local schools parents and citizens should lead a campaign to convince the school board and the State Legislature to carry out the key points in the Quality Schools Agenda.

The Mayor

Mayor Washington's Education Transition Team urged him to break with the past history of mayoral interference in such matters as school system contracts and hiring. However, it also urged him to play a strong leadership role in education, arguing that basic educational reform was vital to the city's economic future. The Transition Team recommended that the Mayor provide leadership in initiating several of the specific reforms that are part of the Quality Schools Agenda, including leadership in creating a Chicago agreement modeled on the Boston Compact.

The city government cannot ignore the threat to the city's future underscored by this research. We recommend that the Mayor provide leadership in the creation of compacts between public schools, on the one hand, and the business community and higher education community, on the other.

The Business Community

The business community has a vital economic stake in the success of the Chicago Public Schools, and many business leaders have reflected a strong commitment to improving the schools over a period of years. The experience of business leaders in Boston suggests a critical role that Chicago's business community can play in turning the Chicago Public Schools around. The Chicago business community should initiate negotiations with the school board and incoming General Superintendent to create a Chicago Compact modeled on the successful Boston agreement between the schools and the business community.

Teachers and Their Representatives

For the past several years, Chicago public school teachers and their representatives have been locked in a struggle with the school board to gain additional wages and benefits from a school system that has limited resources. Wage levels for Chicago teachers are still not adequate, yet those wage increases that have been won have come in part by cutting back on building renovation, instructional programs, etc., in ways that both hurt children and worsen the working conditions of teachers.

It is clear that the salaries and the working conditions of teachers will only be improved substantially if the public in general and the State Legislature in particular perceive that genuine reforms are taking place in the Chicago schools and that the disturbing levels of reading achievement and high school graduation documented in this report are being addressed seriously. If teachers support the type of reforms described in the Quality Schools Agenda, this support can prove decisive in building confidence in the school system's capacity to improve, thus opening the door for significant increases in state funding.

We ask teachers and their representatives to carefully consider the basic directions for reform spelled out in the Quality Schools Agenda and discuss with the school board and other interested parties specific ways to carry out these changes, including the implementation of a school improvement process that shifts substantial decision-making power to teachers and parents at the school level.

State Legislature

The schools in Chicago and elsewhere in the state need more money. But merely giving the Chicago Public Schools more money is unlikely to improve the quality of education for Chicago's children. The state legislature should target a substantial portion of additional funding towards plans for school reform that have proven themselves elsewhere, including a school improvement program for the Chicago Public Schools based on the successful California model, and a dramatic expansion of early childhood education state-wide that affords all families access to full-day kindergarten and all low-income families access to full-day preschool education for their three- and four-year-old children.

The Quality Schools Agenda is a workable plan to save Chicago's failing schools. In this season of educational reform, the public and its representatives must take forceful action at every key level of the educational system to make sure that Chicago's children are not once again denied the chance for a good education that should be their birthright.

Appendix A
SUPPLEMENTARY TABLES

TABLE A-1

Class of 1984 --
High School Completion Rates,
School-by-School[1]

NOTE: These data refer to the Class of 1984 (students who were ninth graders in 1980-81 and would have normally graduated four years later in 1983-84).

Rank Order	School Name	High School Completion Rate	Freshman Enrollment, Fall 1980	Senior Enrollment, Spring 1984
1	Bogan	111%	342	379
2	Taft	100%	455	455
3	Mather	90%	336	301
4	Young	79%	559	444
5	Metro	77%	91	70
6	Lane	77%	1,136	871
7	Curie	74%	788	585
----------	NATIONAL AVERAGE -- 73%	----------	----------	----------
8	Washington	72%	409	294
9	Von Steuben	71%	227	161
10	Prosser	69%	357	248
11	Morgan Park	67%	493	330
12	Steinmetz	63%	642	404
13	Kelvyn Park	62%	449	280
14	Kenwood	62%	707	439
15	Lindblom	62%	661	408
16	Hubbard*	59%	360	213
17	Westinghouse	59%	476	282
18	Kelly	58%	390	228
19	Senn	58%	686	396
20	Amundsen	58%	455	262
21	Farragut*	58%	418	241
22	Gage Park	57%	298	169
23	Juarez	55%	436	239
24	Foreman	55%	375	205
25	Roosevelt	54%	457	247
26	Tilden	54%	488	262
27	Harlan	54%	516	277
28	Harper	51%	414	212
29	Chicago Voc.	50%	1,503	751
30	Kennedy*	50%	466	234
31	Schurz	49%	1,020	501
32	Julian	49%	990	484
33	Near North	49%	241	117
34	Simeon	48%	741	353
35	Dunbar	47%	814	382
36	Corliss	42%	808	339
37	Englewood	41%	490	199
38	Richards	40%	340	137
39	Hyde Park	40%	965	388
40	Lake View	40%	401	161
41	Robeson	38%	513	193
42	Wells	37%	585	219
43	Collins	37%	725	271
44	Fenger	37%	894	332
45	Bowen	37%	1,016	376
46	Lincoln Park	36%	608	220
47	Sullivan	36%	415	150
48	Calumet	36%	645	233
49	Manley	34%	576	198
50	Crane	31%	780	239
51	King	31%	754	230
52	Carver	27%	773	211
53	Orr	27%	869	234
54	Clemente	27%	1,625	434
55	Phillips	24%	1,027	251
56	DuSable	24%	1,250	300
57	Cregier	24%	286	68
58	Marshall	24%	930	220
59	Hirsch	24%	598	141
60	Flower	21%	422	88
61	South Shore	18%	900	164
62	Austin	11%	1,011	115

*Senior enrollments have been adjusted down at these three schools to take into account the effect of the closing of Harrison High School at the end of the 1982-83 school year.

TABLE A-2

Classes of 1980, 1981, 1982, 1983, and 1984 --
High School Completion Rates
(Using Enrollment Data Method as Estimate),
School-by-School[1][2]

School Name	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984
Amundsen	43%	50%	43%	43%	58%
Austin	25%	24%	14%	8%	11%
Bogan	91%	92%	97%	105%	111%
Bowen	38%	40%	38%	40%	37%
Calumet	27%	31%	30%	38%	36%
Carver	33%	26%	27%	28%	27%
Chicago Voc.	62%	64%	62%	53%	50%
Clemente	29%	28%	30%	31%	27%
Collins	42%	31%	36%	41%	37%
Corliss	47%	43%	40%	42%	42%
Crane	35%	44%	28%	27%	31%
Cregier	36%	25%	24%	26%	24%
Curie	76%	67%	72%	78%	74%
Dunbar	78%	65%	65%	69%	47%
DuSable	40%	26%	28%	24%	24%
Englewood	21%	25%	22%	27%	41%
Farragut (a)	37%	39%	38%	42%	58%
Fenger	32%	30%	28%	29%	37%
Flower	36%	40%	24%	20%	21%
Foreman	59%	58%	60%	65%	55%
Gage Park	51%	45%	45%	52%	57%
Harlan	52%	53%	42%	55%	54%
Harper	42%	45%	41%	39%	51%
Hirsch	43%	40%	39%	38%	24%
Hubbard (a)	68%	75%	61%	67%	59%
Hyde Park	44%	35%	58%	54%	40%
Juarez (b)	57%	36%	44%	60%	55%
Julian	47%	54%	67%	54%	49%
Kelly	43%	50%	54%	52%	58%
Kelvyn Park	37%	33%	46%	60%	62%
Kennedy (a)	62%	81%	67%	69%	50%
Kenwood	68%	64%	69%	64%	62%
King	47%	45%	41%	30%	31%
Lake View	39%	31%	35%	28%	40%
Lane	72%	78%	73%	72%	77%
Lincoln Park (c)	20%	24%	38%	37%	36%
Lindblom	67%	74%	63%	61%	62%
Manley	44%	20%	27%	39%	34%
Marshall	30%	23%	22%	29%	24%
Mather	75%	79%	84%	80%	90%
Metro	95%	104%	107%	142%	77%
Morgan Park	66%	73%	68%	69%	67%
Near North (d)	22%	32%	20%	18%	49%
Orr	27%	23%	27%	24%	27%
Phillips	30%	31%	25%	23%	24%
Prosser	60%	52%	63%	54%	69%
Richards	54%	44%	50%	37%	40%
Robeson (e)	26%	23%	29%	30%	36%
Roosevelt	48%	48%	50%	50%	54%
Schurz	46%	45%	49%	56%	49%
Senn	43%	44%	53%	54%	58%
Simeon	56%	59%	68%	51%	48%
South Shore	34%	31%	22%	22%	18%
Steinmetz	72%	64%	78%	67%	63%
Sullivan	51%	55%	44%	50%	36%
Taft	84%	93%	89%	87%	100%
Tilden	44%	37%	40%	43%	54%
Von Steuben	60%	55%	56%	53%	71%
Washington	71%	75%	68%	78%	72%
Wells	27%	32%	35%	31%	37%
Westinghouse	83%	81%	72%	74%	59%
Young	72%	68%	72%	76%	79%

(a) 1984 percentage adjusted to take into account influx of seniors in 1983-84 due to the closing of Harrison High School at the end of the 1982-83 school year.
1980 percentage calculated using Froebal High School freshman enrollment for fall 1976.
1980, 1981, and 1982 percentages calculated using Waller High School freshman enrollments for fall 1976, fall 1977, and fall 1978.
1980, 1981, and 1982 percentages calculated by using Cooley High School freshman enrollments for fall 1976, fall 1977, and fall 1978.
(e) 1980 percentage calculated using Parker High School freshman enrollment for fall 1976.

TABLE A-3

Class of 1984 --
Percent of Seniors Reading At or Above
the National Average,
School-by-School[1][2]

NOTE: These data refer to the Class of 1984 (students who were ninth graders in 1980-81 and would have normally graduated four years later in 1983-84).

Rank Order	School Name	Percent of Seniors Tested That Read At or Above the National Average*	Senior Enrollment, Spring 1984	Estimated Number of Seniors Reading At or Above the National Average**
1	Lane	92%	871	801
2	Young	74%	444	330
3	Lindblom	71%	408	288
4	Mather	67%	301	200
5	Kenwood	66%	439	290
6	Bogan	54%	379	206
7	Kennedy	51%	234	118
----------	NATIONAL AVERAGE -- 50%	----------	----------	----------
8	Taft	48%	455	225
9	Hubbard	47%	213	101
10	Washington	44%	294	130
11	Prosser	44%	248	108
12	Metro	42%	70	30
13	Lincoln Park	42%	220	92
14	Foreman	41%	205	85
15	Steinmetz	41%	404	167
16	Curie	40%	585	234
17	Morgan Park	40%	330	131
18	Kelly	38%	228	87
19	Dunbar	37%	382	143
20	Von Steuben	36%	161	58
21	Roosevelt	34%	247	85
22	Hyde Park	34%	388	131
23	Chicago Voc.	32%	751	241
24	Schurz	30%	501	152
25	Juarez	28%	239	67
26	Gage Park	28%	169	47
27	Amundsen	28%	262	73
28	Sullivan	26%	150	39
29	Corliss	25%	339	85
30	Julian	23%	484	113
31	Westinghouse	23%	282	65
32	Simeon	22%	353	78
33	Fenger	22%	332	73
34	Lake View	22%	161	35
35	Harlan	21%	277	59
36	Kelvyn Park	21%	280	59
37	Bowen	21%	376	80
38	Senn	20%	396	78
39	South Shore	19%	164	31
40	Robeson	18%	193	35
41	Carver	18%	211	38
42	Near North	16%	117	18
43	Calumet	16%	233	36
44	Hirsch	15%	141	21
45	Clemente	13%	434	58
46	King	12%	230	28
47	Collins	12%	271	33
48	Englewood	11%	199	22
49	Phillips	11%	251	28
50	Tilden	10%	262	25
51	Farragut	9%	241	23
52	Austin	9%	115	11
53	Wells	8%	219	17
54	Cregier	7%	68	5
55	Marshall	7%	220	16
56	Orr	7%	234	17
57	Harper	7%	212	15
58	Crane	7%	239	17
59	DuSable	6%	300	19
60	Richards	5%	137	7
61	Manley	5%	198	9
62	Flower	4%	88	4

*Percentages rounded to nearest whole percent.
**The product of the percentage to the nearest hundredth and the senior enrollment.

TABLE A-4

Class of 1984 --
Percent of Seniors Who Will Graduate
Reading Below Minimum Competency Level,
School-by-School[1,2,3]

NOTE: These data refer to the Class of 1984 (students who were ninth graders in 1980-81 and would have normally graduated four years later in 1983-84).

Rank Order	School Name	Percent of Seniors Tested That Will Graduate Reading Below Minimum Competency*	Senior Enrollment, Spring 1984	Estimated Number of Seniors That Will Graduate Reading Below Minimum Competency**
1	Cregier	67%	68	45
2	Orr	65%	234	151
3	DuSable	64%	300	191
4	Manley	62%	198	123
5	Farragut	60%	241	145
6	Harper	60%	212	126
7	Austin	59%	115	68
8	Tilden	57%	262	149
9	Crane	56%	239	133
10	Wells	55%	219	120
11	Marshall	55%	220	121
12	Calumet	54%	233	126
13	Richards	53%	137	73
14	Englewood	52%	199	103
15	King	52%	230	119
16	Phillips	51%	251	128
17	Flower	49%	88	43
18	Clemente	48%	434	209
19	Hirsch	44%	141	61
20	Collins	43%	271	118
21	Senn	43%	396	169
22	Kelvyn Park	41%	280	115
23	Near North	41%	117	48
24	Gage Park	40%	169	68
25	Bowen	37%	376	141
26	Harlan	37%	277	103
27	Lake View	37%	161	60
28	Carver	37%	211	78
29	Fenger	37%	332	121
30	Amundsen	35%	262	90
31	Sullivan	34%	150	50
32	Juarez	33%	239	80
33	Corliss	31%	339	104
34	Julian	28%	484	137
35	Roosevelt	28%	247	69
36	Robeson	28%	193	54
37	South Shore	27%	164	44
38	Kelly	26%	228	59
39	Schurz	26%	501	130
40	Von Steuben	26%	161	41
41	Hyde Park	23%	388	90
42	Westinghouse	23%	282	65
43	Morgan Park	20%	330	66
44	Lincoln Park	20%	220	44
45	Foreman	20%	205	40
46	Simeon	19%	353	66
47	Curie	19%	585	110
----------	NATIONAL AVERAGE -- 18%	----------	----------	----------
48	Steinmetz	18%	404	73
49	Chicago Voc.	18%	751	132
50	Taft	16%	455	75
51	Metro	16%	70	11
52	Washington	15%	294	44
53	Hubbard	15%	213	31
54	Kennedy	14%	234	33
55	Bogan	12%	379	47
56	Prosser	12%	248	30
57	Dunbar	10%	382	37
58	Mather	9%	301	28
59	Kenwood	8%	439	34
60	Lindblom	4%	408	15
61	Young	3%	444	14
62	Lane	1%	871	8

*Percentages rounded to the nearest whole percent.
**The product of the percentage to the nearest hundredth and the senior enrollment.

TABLE A-5

Class of 1984 --
Percent of Well-Prepared Graduates,
School-by-School[1][3]

NOTE: These data refer to the Class of 1984 (students who were ninth graders in 1980-81 and would have normally graduated four years later in 1983-84).

Rank Order	School Name	Percent Well-Prepared Graduates*	Freshman Enrollment, Fall 1980	Estimated Number of Seniors Reading At or Above the National Average
1	Lane	71%	1,136	801
2	Bogan	60%	342	206
3	Mather	60%	336	200
4	Young	59%	559	330
5	Taft	49%	455	225
6	Lindblom	44%	661	288
7	Kenwood	41%	707	290
----------		NATIONAL AVERAGE -- 36%		----------
8	Metro	32%	91	30
9	Washington	32%	409	130
10	Prosser	30%	357	108
11	Curie	30%	788	234
12	Hubbard	28%	360	101
13	Morgan Park	26%	493	131
14	Steinmetz	26%	642	167
15	Von Steuben	26%	227	58
16	Kennedy	25%	466	118
17	Foreman	23%	375	85
18	Kelly	22%	390	87
19	Roosevelt	19%	457	85
20	Dunbar	18%	812	143
21	Amundsen	16%	455	73
22	Chicago Voc.	16%	1,503	241
23	Gage Park	16%	298	47
24	Juarez	15%	436	67
25	Lincoln Park	15%	608	92
26	Schurz	15%	1,020	152
27	Hyde Park	14%	965	131
28	Westinghouse	14%	476	65
29	Kelvyn Park	13%	449	59
30	Harlan	11%	516	59
31	Senn	11%	686	78
32	Julian	11%	990	113
33	Corliss	11%	808	85
34	Simeon	11%	741	78
35	Sullivan	10%	415	39
36	Lake View	9%	401	35
37	Fenger	8%	894	73
38	Bowen	8%	1,016	80
39	Near North	8%	241	18
40	Robeson	7%	513	35
41	Calumet	6%	645	36
42	Farragut	6%	418	23
43	Tilden	5%	488	25
44	Carver	5%	773	38
45	Collins	5%	725	33
46	Englewood	5%	490	22
47	King	4%	754	28
48	Harper	4%	414	15
49	Clemente	4%	1,625	58
50	Hirsch	3%	598	21
51	South Shore	3%	900	31
52	Wells	3%	585	17
53	Phillips	3%	1,027	28
54	Crane	2%	780	17
55	Richards	2%	340	7
56	Orr	2%	869	17
57	Cregier	2%	286	5
58	Marshall	2%	930	16
59	Manley	2%	576	9
60	DuSable	2%	1,250	19
61	Austin	1%	1,011	11
62	Flower	1%	422	4

*Estimated number of seniors reading at or above the national average divided by the freshman enrollment, fall 1980.

TABLE A-6

Class of 1984 --
Cost Per Well-Prepared Graduate,
School-by-School[1,2,4]

NOTE: These data refer to the Class of 1984 (students who were ninth graders in 1980-81 and would have normally graduated four years later in 1983-84).

Rank Order	School Name	Cost Per Well-Prepared Graduate*	Dollars Invested in Class of 1984 Over Four Years	Number of Well-Prepared Graduates
1	Cregier	$ 786,000	$ 3,929,000	5
2	Flower	590,000	2,360,000	4
3	Austin	453,000	4,984,000	11
4	Manley	437,000	3,930,000	9
5	Marshall	407,000	6,517,000	16
6	Orr	403,000	6,854,000	17
7	Crane	364,000	6,184,000	17
8	DuSable	354,000	6,728,000	19
9	Richards	338,000	2,366,000	7
10	Wells	297,000	5,048,000	17
11	Harper	258,000	3,875,000	15
12	Phillips	244,000	6,836,000	28
13	Englewood	218,000	4,796,000	22
14	Farragut	210,000	4,838,000	23
15	South Shore	204,000	6,310,000	31
16	Tilden	198,000	4,948,000	25
17	Near North	195,000	3,503,000	18
18	Clemente	178,000	10,337,000	58
19	Collins	165,000	5,453,000	33
20	King	160,000	4,493,000	28
21	Carver	160,000	6,094,000	38
22	Hirsch	160,000	3,351,000	21
23	Robeson	150,000	5,241,000	35
24	Calumet	138,000	4,973,000	36
25	Lake View	112,000	3,926,000	35
26	Bowen	97,000	7,723,000	80
27	Senn	94,000	7,313,000	78
28	Gage Park	91,000	4,275,000	47
29	Sullivan	90,000	3,503,000	39
30	Kelvyn Park	85,000	5,037,000	59
31	Fenger	85,000	6,170,000	73
32	Juarez	84,000	5,642,000	67
33	Harlan	83,000	4,875,000	59
34	Westinghouse	80,000	5,194,000	65
35	Corliss	80,000	6,770,000	85
36	Simeon	72,000	5,578,000	78
37	Julian	66,000	7,407,000	113
38	Hyde Park	60,000	7,915,000	131
39	Roosevelt	58,000	4,946,000	85
40	Amundsen	58,000	4,219,000	73
41	Von Steuben	57,000	3,324,000	58
42	Schurz	56,000	8,559,000	152
43	Lincoln Park	56,000	5,143,000	92
44	Kelly	56,000	4,829,000	87
45	Foreman	51,000	4,354,000	85
46	Dunbar	51,000	7,324,000	143
47	Chicago Voc.	45,000	10,791,000	241
48	Morgan Park	44,000	5,811,000	131
49	Metro	43,000	1,277,000	30
50	Curie	42,000	9,927,000	234
51	Hubbard	41,000	4,114,000	101
52	Prosser	39,000	4,243,000	108
53	Washington	39,000	5,097,000	130
54	Kennedy	38,000	4,541,000	118
55	Steinmetz	37,000	6,182,000	167
56	Young	32,000	10,495,000	330
57	Taft	26,000	5,788,000	225
58	Mather	25,000	4,960,000	200
----------	APPROXIMATE NATIONAL AVERAGE -- $25,000			----------
59	Bogan	24,000	4,976,000	206
60	Kenwood	23,000	6,572,000	290
61	Lindblom	22,000	6,404,000	288
62	Lane	16,000	12,437,000	801

*Dollars invested in the Class of 1984 over four years divided by the number of Well-Prepared Graduates.

TABLE A-7

Class of 1987 --
Percent of Freshmen Reading At or Above
the National Average in Fall 1983,
School-by-School[1,2,3]

Rank Order	School Name	Percent of Freshmen Tested That Read At or Above the National Average*	Freshmen Enrollment, Fall 1983	Estimated Number of Freshmen Reading At or Above the National Average**
1	Lane	88%	1,183	1,038
2	Young	83%	602	497
3	Lindblom	74%	452	336
4	Von Steuben	66%	415	272
5	Kenwood	63%	858	541
	NATIONAL AVERAGE -- 50%			
6	Lincoln Park	49%	563	278
7	Mather	49%	471	229
8	Taft	45%	408	183
9	Morgan Park	43%	532	228
10	Prosser	41%	387	158
11	Curie	40%	856	346
12	Metro	39%	109	42
13	Washington	37%	466	174
14	Bogan	37%	671	246
15	Hyde Park	33%	1,083	361
16	Steinmetz	33%	597	197
17	Kennedy	30%	508	154
18	Amundsen	28%	419	118
19	Roosevelt	28%	556	153
20	Dunbar	27%	842	231
21	Hubbard	24%	191	46
22	Julian	24%	682	164
23	Juarez	24%	755	178
24	Chicago Voc.	23%	1,153	266
25	Lake View	23%	357	81
26	Schurz	22%	919	207
27	Foreman	22%	306	69
28	Simeon	22%	653	141
29	Senn	21%	743	157
30	Kelly	20%	387	76
31	Sullivan	17%	258	44
32	Westinghouse	17%	455	77
33	Fenger	15%	630	96
34	Harlan	14%	339	49
35	Bowen	14%	760	108
36	Clemente	14%	1,485	211
37	Gage Park	14%	410	58
38	Hirsch	14%	204	29
39	Corliss	14%	639	89
40	Richards	13%	267	36
41	Carver	13%	509	68
42	Near North	13%	338	45
43	Kelvyn Park	13%	521	68
44	Wells	13%	577	73
45	South Shore	10%	770	75
46	Crane	9%	397	37
47	Farragut	9%	684	58
48	King	9%	418	36
49	Tilden	7%	486	36
50	Robeson	7%	403	30
51	Marshall	7%	675	47
52	Manley	7%	417	29
53	Collins	6%	371	23
54	Austin	6%	717	45
55	DuSable	6%	855	51
56	Englewood	6%	352	21
57	Calumet	5%	425	22
58	Flower	5%	262	13
59	Harper	5%	310	15
60	Cregier	5%	286	14
61	Phillips	5%	660	31
62	Orr	4%	876	33

*Percentages rounded to the nearest whole percent.
**The product of the percentage to the nearest hundredth and the senior enrollment.

TABLE A-8

Class of 1987 --
Percent of Fall 1983 Freshmen Who Will Graduate
Reading Below Minimum Competency Level,
School-by-School[1,2,4]

Rank Order	School Name	Percent of Freshmen Tested That Will Graduate Reading Below Minimum Competency*	Freshman Enrollment, Fall 1983	Estimated Number of Freshmen Reading Below Minimum Competency**
1	Orr	60%	876	522
2	Cregier	59%	286	170
3	Austin	56%	717	404
4	DuSable	56%	855	478
5	Tilden	55%	486	269
6	Phillips	54%	660	358
7	Farragut	53%	684	364
8	Collins	53%	371	197
9	Crane	52%	397	206
10	Calumet	50%	425	214
11	Englewood	50%	352	175
12	Flower	49%	262	129
13	Marshall	49%	675	331
14	Harper	48%	310	149
15	Manley	48%	417	199
16	Bowen	48%	760	361
17	Wells	47%	577	271
18	Carver	46%	509	237
19	King	46%	418	191
20	Robeson	44%	403	176
21	Clemente	42%	1,485	628
22	Gage Park	42%	410	173
23	Kelvyn Park	41%	521	211
24	Richards	39%	267	105
25	South Shore	39%	770	298
26	Fenger	38%	630	241
27	Kelly	35%	387	137
28	Near North	35%	338	119
29	Harlan	35%	339	117
30	Corliss	34%	639	219
31	Hirsch	34%	204	69
32	Sullivan	29%	258	75
33	Juarez	28%	755	208
34	Senn	27%	743	201
35	Amundsen	26%	419	111
36	Kennedy	26%	508	133
37	Roosevelt	25%	556	138
38	Schurz	24%	919	219
39	Foreman	23%	306	71
40	Hubbard	23%	191	44
41	Lake View	22%	357	79
42	Hyde Park	19%	1,083	203
----------	----------	NATIONAL AVERAGE -- 18%	----------	----------
43	Julian	18%	682	124
44	Chicago Voc.	18%	1,153	206
45	Simeon	18%	653	116
46	Washington	18%	466	82
47	Westinghouse	17%	455	77
48	Steinmetz	14%	597	85
49	Lincoln Park	13%	563	76
50	Bogan	13%	671	90
51	Dunbar	12%	842	98
52	Mather	11%	471	54
53	Curie	11%	856	93
54	Morgan Park	10%	532	55
55	Taft	10%	408	42
56	Von Steuben	8%	415	33
57	Kenwood	7%	858	61
58	Prosser	5%	387	19
59	Metro	5%	109	5
60	Young	1%	602	6
61	Lindblom	less than 1%	452	3
62	Lane	less than 1%	1,183	6

*Percentages rounded to the nearest whole percent.
**The product of the percentages to the nearest hundredth and the senior enrollment.

TABLE A-9

Chicago's Four-Year High Schools,
Racial Composition and School Type
as of October 31, 1983[1,7]

School Name	Black	Hispanic	Total Minority*	White	Type of High School
Amundsen	6.1%	25.9%	43.1%	56.9%	Non-Selective Integrated
Austin	100.0%	0%	100.0%	0%	Non-Selective Segregated
Bogan	28.5%	17.6%	48.4%	51.6%	Non-Selective Integrated
Bowen	48.1%	51.2%	99.3%	.7%	Non-Selective Segregated
Calumet	100.0%	0%	100.0%	0%	Non-Selective Segregated
Carver	99.9%	0%	99.9%	.1%	Non-Selective Segregated
Chicago Voc.	99.5%	.2%	99.7%	.3%	Selective Vocational
Clemente	13.2%	79.6%	94.9%	5.1%	Non-Selective Segregated
Collins	100.0%	0%	100.0%	0%	Non-Selective Segregated
Corliss	99.8%	.1%	99.9%	.1%	Non-Selective Segregated
Crane	99.8%	.2%	100.0%	0%	Non-Selective Segregated
Cregier	100.0%	0%	100.0%	0%	Non-Selective Segregated
Curie	23.4%	32.3%	58.7%	41.3%	Non-Selective Integrated
Dunbar	99.9%	.1%	100.0%	0%	Selective Vocational
DuSable	100.0%	0%	100.0%	0%	Non-Selective Segregated
Englewood	100.0%	0%	100.0%	0%	Non-Selective Segregated
Farragut	53.7%	45.5%	99.2%	.8%	Non-Selective Segregated
Fenger	99.5%	0%	99.9%	.1%	Non-Selective Segregated
Flower	99.8%	.2%	100.0%	0%	Non-Selective Segregated
Foreman	39.8%	14.7%	56.2%	43.8%	Non-Selective Integrated
Gage Park	48.5%	10.9%	60.5%	39.5%	Non-Selective Integrated
Harlan	99.9%	0%	99.9%	.1%	Non-Selective Segregated
Harper	100.0%	0%	100.0%	0%	Non-Selective Segregated
Hirsch	99.7%	0%	99.7%	.3%	Non-Selective Segregated
Hubbard	24.3%	19.7%	44.6%	55.4%	Non-Selective Integrated
Hyde Park	99.7%	.2%	99.9%	.1%	Non-Selective Segregated
Juarez	1.4%	94.6%	96.3%	3.7%	Non-Selective Segregated
Julian	100.0%	0%	100.0%	0%	Non-Selective Segregated
Kelly	.9%	38.7%	40.2%	59.8%	Non-Selective Integrated
Kelvyn Park	4.4%	76.2%	81.8%	18.2%	Non-Selective Segregated
Kennedy	34.7%	12.9%	47.7%	52.3%	Non-Selective Integrated
Kenwood	77.8%	.5%	80.2%	19.8%	Non-Selective Segregated
King	100.0%	0%	100.0%	0%	Non-Selective Segregated
Lake View	18.2%	51.0%	74.3%	25.7%	Non-Selective Segregated
Lane	13.3%	15.6%	45.0%	55.0%	Selective Academic
Lincoln Park	49.3%	13.1%	66.6%	33.4%	Non-Selective Integrated
Lindblom	98.8%	0%	100.0%	0%	Selective Academic
Manley	100.0%	0%	100.0%	0%	Non-Selective Segregated
Marshall	100.0%	0%	100.0%	0%	Non-Selective Segregated
Mather	15.8%	6.5%	37.0%	63.0%	Non-Selective Integrated
Metro	75.2%	12.6%	88.6%	11.4%	Non-Selective Segregated
Morgan Park	68.6%	1.7%	70.4%	29.6%	Non-Selective Segregated
Near North	82.1%	8.8%	94.6%	5.4%	Non-Selective Segregated
Orr	87.6%	12.3%	99.9%	.1%	Non-Selective Segregated
Phillips	100.0%	0%	100.0%	0%	Non-Selective Segregated
Prosser	28.2%	29.6%	60.0%	40.0%	Selective Vocational
Richards	47.3%	44.2%	92.5%	7.5%	Non-Selective Segregated
Robeson	100.0%	0%	100.0%	0%	Non-Selective Segregated
Roosevelt	8.8%	25.0%	49.1%	50.9%	Non-Selective Integrated
Schurz	12.1%	42.7%	57.4%	42.6%	Non-Selective Integrated
Senn	24.8%	25.1%	75.8%	24.2%	Non-Selective Segregated
Simeon	100.0%	0%	100.0%	0%	Selective Vocational
South Shore	99.9%	0%	99.9%	.1%	Non-Selective Segregated
Steinmetz	28.9%	12.9%	45.3%	54.7%	Non-Selective Integrated
Sullivan	42.8%	18.1%	71.6%	28.4%	Non-Selective Segregated
Taft	22.5%	4.7%	31.2%	68.8%	Non-Selective Integrated
Tilden	73.7%	16.6%	90.6%	9.4%	Non-Selective Segregated
Von Steuben	18.7%	18.3%	57.7%	42.3%	Non-Selective Integrated
Washington	11.3%	29.3%	41.5%	58.5%	Non-Selective Integrated
Wells	20.1%	71.8%	92.7%	7.3%	Non-Selective Segregated
Westinghouse	100.0%	0%	100.0%	0%	Selective Vocational
Young	58.3%	15.1%	80.3%	19.7%	Selective Academic

*Includes black, Hispanic, American Indian, Alaskan native, and Asian or Pacific Islander students.

NOTES

NOTES

[1]Arthur Hyde and Donald Moore, Education Equity and Parent and Citizen Involvement in School District Financial Decisions, final report to the National Institute of Education, Grant 79-0173 (1984); Donald R. Moore et al., Child Advocacy and the Schools: Past Impact and Potential for the 1980s, final report to The Carnegie Corporation of New York (1983); Donald Moore and Arthur Hyde, Rethinking Staff Development: A Handbook for Analyzing Your Program and Its Costs (New York: Ford Foundation, 1978); Donald R. Moore et al., Assistance Strategies of Six Groups that Facilitate Educational Change at the School/Community Level, final report to the National Institute of Education, Grant 74-0052 (1977); and Donald R. Moore, Principal Investigator, A Multi-Method Study of the Development of an Alternative High School Learning Environment, final report to the National Institute of Education and National Institute of Mental Health, 1975.

[2]The data in Table 1 are drawn from data presented in Tables 3, 7, and 9. For complete data sources for all information in Table 1, see Notes 16, 33, 41 and 47.

[3]For data sources and method of calculating membership for each school type, see Note 13. For explanations of criteria for classification of each four-year high school into one of the school types, see Notes 25-31 and accompanying text. For a list of the individual high schools placed in each school type, see Appendix Table A-9.

[4]For example, see explanations for methods of calculation in Notes 14 and 19.

[5]Chicago Public Schools recently released a report which acknowledges that their reporting system is deficient. Chicago Public Schools, Report on Dropout Reduction (December 1984), pp. 1-4. Other reports also show great variations between officially reported dropout rates and those calculated by independent researchers. See, for example, Charles Lambert Kyle, "Los Preciosos -- The Magnitude of and Reasons for the Hispanic Dropout Problem in Chicago: A Case Study of Two Chicago Public High Schools," (doctoral dissertation, Northwestern University, June 1984); and William L. Humm, "Testimony to the Illinois State Task Force on Hispanic Student Dropouts," Chicago, Illinois, 6 February 1985. (Mimeographed.)

[6]Kyle, "Los Preciosos."

[7]Ibid.

[8]Ibid. In a telephone conversation, Kyle amplified on his observations concerning students who were officially listed as transfers. He noted, for instance, that in one school that he studied, 70 students claimed to have transferred to parochial high schools, but through follow-up calls to the schools, he was only able to verify that five had actually enrolled.

The fact that the Chicago Public Schools has no procedure for verifying that students who say they are transferring actually transfer has been recently acknowledged in newspaper accounts by top school officials. See "Rate Tops 36% Here," Chicago Sun-Times, 1 February 1985, sec. 1, pp. 1-2 and "City School Dropout Rate Elusive," Chicago Tribune, 4 February 1985, sec. 2, p. 6.

[9]Computerized data systems now in wide use in public school systems for keeping track of students' course assignments, test scores, credits completed, etc.,

routinely assign each student such a unique computer number, and this number can be used for developing a precise indication of the dropout rate in a school system. The Chicago Public Schools has had such a computer system in operation for more than a decade.

[10]See, for example, Isidro Lucas, Puerto Rican Dropouts in Chicago: Numbers and Motivations (Chicago: Council on Urban Education, 1971); Citizens' Council for Ohio Schools, Citizen Guide to Children Out of School: The Issues, Data, Explanations, and Solutions to Absenteeism, Dropouts, and Disciplinary Exclusion (Cleveland: Author, 1984).

[11]This analysis is currently in progress, and results are expected in spring 1985.

[12]See, for example, Citizens' Council for Ohio Schools, Citizen Guide; United States Department of Education, State Education Statistics, released January 5, 1985 (reported in "Dropout Rate in Schools Rose Sharply Since '72," The New York Times, 6 January 1985, p. 10); Humm, "Testimony."

[13]The following Chicago Public Schools documents were used to determine membership counts for individual schools and for the four school types: Membership as of June 29, 1984; Membership as of January 27, 1984; Fall 1983 Test Scores and Selected School Characteristics; Membership as of June 17, 1983; Membership as of October 29, 1982; Membership as of June 25, 1982; Membership as of October 31, 1980; Membership as of June 26, 1980; Membership as of October 31, 1979; Membership as of June 15, 1979; Membership as of October 31, 1978; Membership as of June 16, 1978; Membership as of October 31, 1977; Membership as of June 16, 1977; and Membership as of October 29, 1976. These documents count high school students in seven categories: 9th grade, 10th grade, 11th grade, 12th grade, special education program, satellite program, and ungraded program.

Since some students are not included in the grade-by-grade counts because they are included in the special program counts (special education, satellite, and ungraded), the research team estimated grade-by-grade memberships on an individual school basis, by spreading these special program students among the four grades in the same proportion that all other students in a given high school were spread among the four grades. For example, if a given school had 110 students, where 30 were 9th graders, 30 were 10th graders, 20 were 11th graders, 20 were 12th graders, and 10 were in special programs, the research team counted 33 as 9th graders, 33 as 10th graders, 22 as 11th graders, and 22 as 12th graders.

Similarly, in estimating the grade-by-grade memberships for the four school types (described on p. 22 of this report) and for the classes of 1983, 1982, 1981 and 1980 overall, special students were spread over the four years in the same proportion as regular students were spread over the four years. In addition, 11th and 12 graders from Jones High School were added to the calculation of the Non-Selective Segregated category, when appropriate, on the assumption that students from this school entered primarily from other Non-Selective Segregated High Schools. Harrison High School, which closed in June of 1983, was not included in these enrollment estimates, except as specified in Notes 22 and 35. In estimating total grade-by-grade enrollment for the four school types, each of the seven categories of students from the school-by-school membership counts were totaled separately for a given school type. Then, special students were spread over the four high school grades using the procedure described above. Thus, there are minor variations between the school type totals reported in Table 3 and the sums of the individual school counts for the schools in a particular school type as listed in Table A-1. The estimates of 9th grade enrollment totals for the four school types for the class of 1987, however, were determined by adding together the individual school counts for each school in a particular school type, after the special students had already been spread over the four grades for each individual school.

For the enrollments overall for the Class of 1984 and for the Class of 1987, as presented, for example, in Tables 3 and 16, membership counts were determined by adding the enrollments for each of the four school types described on p. 22 of this report.

Except for 1983, the "Fall" counts in this report come from the October membership reports mentioned above. For "Fall" 1983, the counts for each individual grade and for the special education program came from Fall 1983 Test Scores and Selected School Characteristics, and the counts for the satellite and non-graded programs came from Membership as of January 27, 1984. All "Spring" counts in this report came from the June membership reports mentioned above.

[14]One reason for using the Spring 1984 enrollment data for estimating the High School Completion Rate for the Class of 1984 in this study was that school-by-school graduation data for the Class of 1984 was not available during the course of this study. Even if graduation data had been available, however, the accuracy of the Board's process for calculating the number of graduates is questionable because it employs problematic methods. This process, briefly described, involves making an initial estimate of the number of graduates for June and August graduations at the individual school level, and then correcting this estimate over time (some students are added, others are subtracted because they don't actually graduate). The initial estimates are telephoned into the central office, and then the number is periodically updated during the next several months. This unwieldy process raises questions as to whether some students are counted twice and others not at all. To be sure that neither method would yield significantly different results, we compared the High School Completion Rate obtained using the Enrollment Data Method with the High School Completion Rates obtained using the number of reported graduates for the Classes of 1980, 1981, and 1982. For the various school types analyzed in this report, the results were as follows:

	High School Completion Rates					
	1980		1981		1982	
	Method 1*	Method 2**	Method 1	Method 2	Method 1	Method 2
All Schools	47.4%	47.3%	45.9%	45.7%	45.8%	46.3%
Selective Academic	70.3%	72.8%	73.6%	75.7%	70.0%	73.0%
Non-Selective Integrated	60.4%	59.7%	61.7%	61.2%	62.8%	62.5%
Selective Vocational	66.8%	64.5%	64.2%	60.0%	65.2%	65.6%
Non-Selective Segregated	38.8%	39.2%	36.4%	36.8%	36.2%	37.1%

*Method 1 is the Enrollment Data Method as described on pp. 13-15 of this report.
**For Method 2, the senior enrollment is replaced by the reported number of graduates.

As the table reveals, the two methods yield extremely similar results. The "Chicago Public Schools Overall" variation, for example, was at most .5%. The results of this analysis convinced the research team that the spring enrollment data yields an estimate of the High School Completion Rate very close to that yielded by using official graduation rates.

In order to test the reliability of the Enrollment Data Method as an estimate of the High School Completion Rate for individual schools, the research team compared the High School Completion Rate using the Enrollment Data Method with a High School Completion Rate calculated by dividing the individual school's reported number of graduates in a given year by the fall freshman enrollment four years earlier. This was done for the classes of 1980, 1981, and 1982, the years for which the research team had complete school-by-school graduation data. Our findings from this comparison were as follows:

(1) In the case of 22 schools, the spring enrollment data yielded a higher High School Completion Rate, but the variance was not more than a few percentage points. In the cases of these schools, this report may slightly overestimate an individual school's High School Completion Rate.

(2) In the case of 7 schools, the results were almost identical using either method.

(3) In the case of 26 schools, the spring enrollment data yielded a lower High School Completion Rate, but the variance was no more than a few percentage points. In the cases of these schools, this report may slightly underestimate the individual High School Completion Rate.

(4) In the case of 7 schools, the use of spring enrollment data yielded a significantly lower High School Graduation Rate for one to three of the years examined (1980, 1981, and 1982). In these cases, the research team contacted the schools to check the figures. In some cases, we were refused information. In most, we were given help. We found, for example, that at the end of their junior year, borderline students are returned to Junior Divisions at Sullivan rather than passed to a Senior Division. Many of these students graduate at the end of their fourth year, but they are counted as juniors in the enrollment counts. Thus, the Enrollment Data Method has underestimated the actual High School Completion Rate at Sullivan. In cases such as this one, this report has appropriately qualified results.

[15]An example best illustrates this point. Suppose that 100 students were 9th graders in Year 1, that all these 9th graders progressed to 10th grade the next year, and that 50 finished in 4 years (graduated in Year 4), 40 were non-completers, and 10 finished in 5 years (graduated in Year 5). Suppose further that 100 students were 9th graders in Year 2, 50 finished in 4 years (graduated in Year 5), 40 were non-completers, and 10 finished in 5 years (graduated in Year 6). Then the High School Completion Rate using the Student Tracking Method for the 9th graders in Year 2 is:

$$\frac{\text{50 graduates in Year 5 of the Year 2 ninth graders (plus) 10 graduates in Year 6 of the Year 2 ninth graders}}{\text{100 ninth graders in Year 2}} = 60\%$$

The High School Completion Rate using the Enrollment Data Method for the 9th graders in Year 2 is:

$$\frac{\text{50 graduates in Year 5 of the Year 2 ninth graders (plus) 10 graduates in Year 6 of the Year 1 ninth graders}}{\text{100 ninth graders in Year 2}} = 60\%$$

Thus, the High School Completion Rate using either method yields the same result since late graduates offset each other. This over-simplified example does not take into account the impact of students who repeat 9th grade; the impact of this factor is discussed on pages 14-15 of this report. An analysis of the impact of the three-year graduate is similar to the analysis of the impact of the five-year graduate.

[16]Despite a specific request to Board of Education staff, Designs for Change has not been provided with information that will allow a straight-forward estimate of the percent of a given class who transfer to other school systems over a four-year period. However, there is some available data that allows an informed estimate.

First, the school system recently released dropout data for the Class of 1984, based on their leave codes. System-wide, the Chicago Public Schools claimed that 36% of the Class of 1984 dropped out over the four-year period. See "Rate Tops 36% Here," Chicago Sun-Times. (We will use the 36% rate in the discussion below, although the Board staff has also recently reported a dropout rate of 40%. See "City School Dropout Rate Elusive," Chicago Tribune.) Based on the present research, we estimate that 53% of the Class of 1984 failed to complete high school in the Chicago Public Schools. Thus, one approximation of the percent of transfers to other school systems in the Class of 1984 is 17% (53% Non-Completers minus 36% dropouts equals 17% transfers). In addition, Kyle, "Los Preciosos," found that the official transfer rates for a four-year class averaged about 16% at the two high schools he studied (telephone conversation). However, there is abundant evidence that the number of students listed as transfers includes many students who in fact drop out. The school system's own staff admitted this in releasing its official dropout figures (Chicago Sun-Times). Further, the school-by-school dropout figures they released contain obvious underestimates of the true numbers of dropouts for a number of individual schools. For example, the following schools that, based on our analysis of enrollment data, have a dropout rate of more than 50% over four years were listed in the official school system statistics as having only a small number of dropouts in the 1983-85 school year: Flower, Richards, Cregier, Calumet, Corliss, Collins, Crane, and Marshall. Further, Kyle found that many students listed officially as transfers at the high schools he studied had in fact dropped out (see Note 8). Thus, we conclude that a fair estimate of the number of students who actually transferred to other school systems to attend a regular day-school program is about one-half the rate indicated by the official statistics or about 8%. Based on this estimate, then, 47% of the Class of 1984 graduated from the Chicago Public Schools, 8% transferred to other school systems, and 45% dropped out.

[17]The most recently avaiiable figure is 73% (rounded from 72.8%) from year 1982. "Databank: State Education Statistics: State Performance Outcomes, Resource Inputs, and Population Characteristics, 1972 and 1982," Education Week, 18 January 1984, p. 12.

[18]Dale P. Scannell, Tests of Achievement and Proficiency, Teacher's Guide (with 1982 Norms), (Chicago: The Riverside Publishing Company, 1983) (TAP Teacher's Guide). The Chicago Public Schools provided Designs for Change with the following information on computer printouts: (1) school-by-school, grade-by-grade frequencies of students who scored at each of the national percentiles in reading and mathematics and (2) school-by-school, grade-by-grade numbers of students taking each part of the test.

[19]For the class of 1984, the Percent of Well-Prepared Graduates was calculated for each four year high school in the study, for each of the school types described on p. 22 of this report, and for Chicago high schools overall. The formulas for calculating "Number in a Class reading at or above the National average in the Spring of their Twelfth Year" (numerator of the equation on p. 13 of this report) are as follows:

$$N_{\text{individual school}} = \frac{\text{number of 12th graders tested at that school who scored at or above the national average}}{\text{number of seniors tested at that school}} \times \text{spring 12th grade enrollment at that school}$$

$$N_{\text{aggregate}} = \frac{\sum \text{number of 12th graders scoring at or above the national average at each school in the aggregate}}{\sum \text{number of seniors tested at each school in the aggregate}} \times \sum \text{spring 12th grade enrollment at each school in the aggregate}$$

$$N_{\text{overall}} = \sum \text{aggregates}$$

The methods for calculating spring enrollments are explained in Note 13. Because of the method used (see Note 13), totals for a school type may vary slightly from the sum of the totals for each individual school in the school type.

Note that while the tests were administered to 12th graders in the fall of their 12th grade year (fall 1983), the N's were calculated based on spring enrollment. This calculation assumes that from the time of the testing until the end of the school year, each child at or above the national average progressed at the normal pace, so that they were still at or above the national average at the end of the year. While some students originally below the national average may have accelerated their growth rate so that by the end of the year they were at or above the national average, the research team considered these variations to be inconsequential.

An example will illustrate how, if at all, the number of students at or above grade level for an individual school has been overestimated rather than underestimated. Suppose that 90 of 100 students took the TAP test, that the 10 who didn't take it were low achievers and that 40 students who took the test scored at or above the national average. Then the actual number of the 100 students who would have scored at or above the national average -- had all students actually taken the test -- would have been 40. The research team's estimate of this number, however, assumed that the same percentage who didn't take the test would have scored at or above the national average as those who actually took the test; thus, the estimate of those who scored at or above the national average is 44 of 100 students (40/90 x 100). Some students not taking the test may have scored at or above the national average. But it is safe to assume that this group, overall, would not do better than those who actually took the test. Thus, if anything, the research team has overestimated the number of seniors at each school who scored at or above the national average.

The percentage of senior students actually taking the test at individual schools was as low as 64%, with all schools but four in the study above 80%. Those schools with the lowest percentage of students tested all had very poor test results. Overall, 87% of seniors were tested. At Selective Academic High Schools, 96% were tested; at Selective Vocational Schools, 93% were tested; at Non-Selective Integrated Schools, 93% were tested; and at Non-Selective Segregated Schools, 90% were tested.

[20]See TAP Teacher's Guide, pp. 25-26, 71, 73-76 for an explanation of Minimum Competency Level criteria. The methods for calculating percentages of students below minimum competency and numbers of students below minimum competency were similar to those used in calculating the percentage and numbers of students at or above the national average, as described at Note 19.

[21]The research team does not suggest that this model can be strictly applied in measuring the the success of educational programs. See p. 19 of the text for cautions.

[22]To estimate the amount spent on the Class of 1984 over a four-year period for Chicago overall and for the four school types (see p. 22), the research team totalled the amount spent on the Class of 1984 over a four-year period at each of the high schools. An adjustment was made, when necessary, because Jones High School is only a two-year high school and because some students who subsequently attended other high schools came from Harrison High School, which closed in June 1983.

To estimate the total amount expended on the Class of 1984 over a four-year period at an individual school, the research team divided the sum of the total amounts spent on that school for each of the four school years (1980-81, 1981-82, 1982-83, and 1983-84) by 4. The Class of 1984 as freshmen in 1980-81 and as sophomores in 1981-82 were actually more than one quarter of the total school population. Thus, we have underestimated the amounts spent on the Class of 1984 in those years; however, this is balanced out by the resulting overestimation of the amounts expended when the Class of 1984 were juniors in 1982-83 and seniors in 1983-84 and were actually less than one-quarter of the total school population. The formula used to determine the "Total Amount Expended on the Class of 1984 Over a Four Year Period" at an individual school was as follows:

$$\text{Total Amount} = \frac{\text{FY 84} + \text{FY 83} + \text{FY 82} + \text{FY 81}}{4}$$

$$= \frac{\text{FY 84} + (2.8629)\ (\text{FY 83})}{4}$$

where Total Amount = Total Amount Expended on the Class of 1984 Over a Four Year Period at an individual school, FY 84 = amount spent at an individual school in school year 1983-84, FY 83 = amount spent at an individual school in school year 1982-83, FY 82 = amount spent at an individual school in school year 1981-82, and FY 81 = amount spent at an individual school in school year 1980-81. These total amounts include a portion of central and district office expenditures distributed on a per-pupil basis. Since the research team did not have exact school-by-school expenditures available for FY 81 and FY 82, we estimated those expenses based on a comparison of the Chicago Public Schools' overall budgets for FY 81 and FY 83, and FY 82 and FY 83. The FY 81 budget was .9593 of the FY 83 budget. The FY 82 was .9036 of the FY 83 budget. Sources used in the actual calculations include: Chicago Panel on Public School Finances, Revenue Short Falls at the Chicago Board of Education, 1970-1984 (Chicago: Author, 1984); Chicago Public Schools, Plan for the Improvement of Instruction for Disadvantaged Students in Chicago Public Schools (November 1983); Chicago Public Schools, Fall 1983 Test Scores and Selected School Characteristics--High Schools (undated).

[23]For individual schools, the percentage of 9th grades in the Class of 1987 reading at or above the national average and percentage of 9th graders whom the test makers predict will definitely finish high school reading below minimum

competency were calculated using the data described in Note 18 and the test maker guidelines for minimum competency referenced in Note 20.

To calculate the number of students at individual high schools reading at or above the national average or below minimum competency, the percentages described above were multiplied by the 9th grade fall enrollments at each school (enrollments calculated according to the methods described in Note 13).

To calculate the number of these ninth graders reading above the national average and below minimum competency for the four school types and for Chicago high schools overall, appropriate school data were totalled.

[24]The Tests of Achievement and Proficiency were renormed in 1982 and, therefore, comparisons would have been difficult. In addition, Designs for Change did not have the same type of detailed data about performance of 9th graders in the 1980 testing that was made available for the fall 1983 testing.

[25]United States v. Board of Education of the City of Chicago, 554 F. Supp 912, 918 (1983). "Under The Plan's definitions a school is 'integrated' or 'desegregated' if it has at least 30% minority and at least 30% white students enrolled." Since all Chicago four-year high schools included in the study were at least 30% minority, the key to classification was whether a school was also at least 30% white (in which case it was classified as "integrated"), or more than 70% minority (in which case it was classified as "segregated").

[26]The three selective academic high schools and the five selective vocational high schools are identified in Table A-9. In addition to telephone interviews to each of these schools (as well as others which the research team suspected might be selective) to identify selection criteria, the following documents were used in classifying schools: Chicago Public Schools, Options for Knowledge (April 1984); and Chicago Public Schools, Annual Desegregation Review, 1[illegible]-1984, Part II: Recommendations on Educational Components (September 1984) p. 485-493.

[27]For example, Lincoln Park has three selective programs, The International Baccalaureate Program, the Options for Knowledge Fine Arts Program, and the Options for Knowledge Math and Science Program. The first of the programs involves a small number of students (60-90 per year) and has very strict academic admissions criteria; students must be above the ninetieth percentile on elementary school achievement tests to be admitted. The second and third programs involve about one-third of the enrollment in the school, and admissions criteria include consideration of elementary school reading scores, elementary school achievement, and previous records of attendance and attitude. Similarly, other schools such as Metro, Kenwood, and Morgan Park, have selection criteria which either are not as stringent as those of schools labeled "selective" in this study and/or do not affect all students enrolled in the schools. (As noted earlier, such information about admissions criteria was gathered through telephone interviews and through examining Chicago Board of Education documents.)

[28]See Table A-9 for a list of the schools in this category.

[29]Ibid.

[30]Ibid.

[31]Ibid.

[32]See Note 16.

[33]For data sources and methods of calculation, see Section 2 and accompanying notes. The High School Completion Rate for suburban Cook County is drawn from

Gary Orfield et al., "The Chicago Study of Access and Choice in Higher Education (A Report to the Illinois Senate Committee on Higher Education)," Chicago, September 1984 (mimeographed), Table 81 (unnumbered).

[34]Kyle, "Los Preciosos"; Lori S. Orum, Hispanic Dropouts: Community Responses (Washington, DC: National Council of La Raza, 1984).

[35]To identify individual schools that are predominantly black and predominantly Hispanic, see Table A-9. For data sources and methods of calculation, see Section 2 and accompanying notes and Note 33. The number of graduates in the predominantly Hispanic schools has been adjusted to account for graduates who transferred from Harrison High School, which closed in June 1983 and was not included in the study. According to guidance counselors who were at Harrison at the time of its closing, roughly one-third of those Harrison students who continued to twelfth grade went to Farragut. Farragut was the only school of the predominantly Hispanic high schools which was substantially impacted by Harrison's closing.

[36]For data sources and methods of calculation, see Section 2 and accompanying notes.

[37]See Tables A-1 and A-9 for data on which this classification was based.

[38]Ibid. Because individual school estimates of the Completion Rate may vary somewhat from the actual Completion Rate, the reader is cautioned to pay attention to the relative rankings of schools and the ranges in which a school falls, rather than the specific percentages in Table A-1.

[39]For methods of calculation, see Note 19.

[40]Ibid.

[41]For methods of calculation and data sources, see Section 2 and accompanying notes.

[42]See Table A-3 for estimates of numbers of students at each school reading at or above the national average. For data sources, see Note 18.

[43]See Table A-3.

[44]For methods of calculation and data sources, see Section 2 and accompanying notes.

[45]TAP Teacher's Guide, pp. 25-26, 71, 73-76.

[46]Data sources are identified in Note 18. Criteria for making these classification judgments are referenced in Note 45.

[47]For methods of calculation and data sources, see Section 2 and accompanying notes.

[48]See Table A-4 for estimates of numbers of students at each school reading below minimum competency. For data sources, see Note 18.

[49]See Section 2, pp. 16-18, and accompanying notes.

[50]Based on the most recently available national data, the national High School Completion Rate was estimated to be 72.8% in 1982 (see note 17). Of the 72.8% who graduated, half read at or above the national average. Thus 36% of an original ninth

grade class of 1982 (rounded to the nearest percentile) both completed high school and read at or above the national average.

[51]See Note 55.

[52]Note that since the reading levels of high school seniors were so low in most of the schools identified with an asterisk (*), variations in a school's High School Completion Rate typically had only a small impact on the research team's estimate of a school's Percent of Well-Prepared Graduates. For example, a school with 10% of its original ninth grade class classified as Well-Prepared Graduates based on our analysis would have only 11% Well-Prepared Graduates if one assumed that the school's High School Completion Rate was 10% higher than the completion rate calculated in this study. To put it another way, the reading scores of Chicago's high school seniors are so low in most schools that taking account of possible variations in the dropout rate in these schools has only a small effect on estimates of Percent of Well-Prepared Graduates.

[53]For data sources and methods of calculation, see Section 2 and accompanying notes.

[54]The data in Table 12 are drawn from data presented in Tables 3, 7, and 9. For complete data sources for all information in Table 12, see Notes 16, 33, 41, and 47.

[55]See Tables A-5 and A-9 for data on which these classifications were based. Because individual school estimates of the Percent of Well-Prepared Graduates may vary somewhat from the actual Percent of Well-Prepared Graduates, the reader is cautioned to pay more attention to the relative rankings of the schools and the categories in which they have been placed in Table 13 than to the specific percentages for individual schools in Table A-5.

[56]For data sources and methods of calculation, see Section 2 and accompanying notes, as well as Note 57.

[57]The derivation of the estimate of the National Cost Per Well-Prepared Graduate is as follows:

$$\text{National Cost Per Well-Prepared Graduate} = \frac{\text{Total Cost Per Hundred Students Nationally in the Class of 1984}}{\text{Thirty-six Well-Prepared Graduates Per Hundred Students in the Class of 1984}}$$

$$= \frac{(73)(\$12{,}000) + (27)(\$9{,}000)}{36}$$

$$= \$31{,}083$$

This calculation is based on the following assumptions: (1) the National High School Completion Rate is 73%, (2) the National Percent of Well-Prepared Students is 36%, (3) the average national per-pupil expenditure for school years 1980-81 through 1983-84 was $3,000 per year, and (4) the 27% Non-Completers leave school between the 11th and 12th grade. See Note 17 for a justification of the first assumption. See Note 50 for a justification of the second assumption. The third assumption, if anything, overestimates the average yearly expenditure per pupil

for the relevant years. National cost data comparable to the cost data used in this study's Chicago schools cost calculations (see note 22) indicates that national per pupil costs for 1981-82 and for 1982-83 averaged $2,724 and $2,948 respectively. See "Databank: State Education Statistics: State Performance Outcomes, Resource Inputs, and Population Characteristics, 1982 and 1984, Education Week, 9 January 1985, p. 13. It is safe to assume since the cost per pupil for 1981-82 was less than $3,000, the cost per pupil for 1980-81 was also less than $3,000. Thus, even if the cost per pupil for 1983-84 slightly exceeds $3,000, the average cost per year over the four years is less than $3,000. The fourth assumption, if anything, overestimates the time that the typical Non-Completer remains in school, and thus may inflate the Cost Per Well-Prepared Graduate nationally. Since the research team's purpose in making this national estimate was to have a basis of comparison to Chicago's Costs Per Well-Prepared Graduate, the team determined to err on the side of overestimation so that Chicago would not be compared to an unfair national standard.

[58]See Note 22 for data sources and methods of calculation.

[59]See Note 60.

[60]See Tables A-6 and A-9 for data on which these groupings are based. For original data sources and methods of calculation, see Section 2 and accompanying footnotes. Because individual school estimates of the Cost Per Well-Prepared Graduate may vary somewhat from the actual Cost Per Well-Prepared Graduate, the reader is cautioned to pay more attention to the relative rankings of the schools and the categories in which they have been placed in Table 15 than to the specific costs cited for individual schools in Table A-6.

[61]For data sources and methods of calculation see Note 23.

[62]A further reason to give credence to these test results is that high school staff have no incentive to inflate the scores of entering ninth graders since they are not being held accountable for the initial performance of these students.

[63]See Note 20.

[64]Ibid.

[65]See Table A-7 for school-by-school estimates of the numbers of 9th grade students reading at or above the national average. For data sources, see Note 23.

[66]For data sources and methods of calculation, see Note 23.

[67]See Table A-8 for school-by-school estimates of numbers of ninth graders reading below minimum competency. For data sources, see Note 23.

[68]For data sources and methods of calculation, see Notes 20 and 23.

[69]See Note 24.

[70]A basic research strategy employed by Designs for Change has been to study a particular urban education issue or type of reform program in several different cities. Topics analyzed in this way have included teacher retraining, alternative public schools, school-level consultation to educators and parents, child advocacy on school issues, and citizen involvement in school district budget decision-making. See references to related publications in Note 1.

[71]Designs for Change, "Annual Report 1983-84," Chicago 1984. (Mimeographed.)

[72]Designs for Change, Barriers to Excellence: Our Children at Risk in Illinois (Chicago: Author, 1985).

[73]Washington Transition Committee, Toward a Prosperous, Compassionate and Efficient Chicago: Policy Recommendations (Chicago: Author, 1983), pp. 57-58.

[74]The Commercial Club of Chicago, Make No Little Plans: Jobs for Metropolitan Chicago (Chicago: Author, 1984).

[75]Commercial Club, Make No Little Plans; Washington Transition Committee, Toward a Prosperous, Compassionate and Efficient Chicago.

[76]Peter H. Rossi, Why Families Move (Beverly Hills, CA: Sage Publications, 1980).

[77]Attempts to identify the qualities of instructionally effective schools are reported in the following: The Phi Delta Kappa Study of Exceptional Urban Elementary Schools, Why Do Some Urban Schools Succeed? (Bloomington, IN: Phi Delta Kappa, 1980); Wilbur B. Brookover et al., School Social Systems and Student Achievement (New York: Praeger, 1979); Michael Rutter et al., Fifteen Thousand Hours: Secondary Schools and Their Effects on Children (Cambridge: Harvard University, 1979); Ron Edmonds and John Frederiksen, "Search for Effective Schools: The Identification and Analysis of City Schools That Are Instructionally Effective for Poor Children," Center for Urban Studies, Harvard University, 1978; State of New York, Office of Education Performance Review, School Factors Influencing Reading Achievement: A Case Study of Two Inner City Schools (Albany: Author, 1974); George Weber, Inner-City Children Can Be Taught to Read: Four Successful Schools (Washington, DC: Council for Basic Education, 1971).

[78]See, for example, Brookover et al., School Social Systems and Student Achievement, pp. 147-148; Rutter et al., Fifteen Thousand Hours, pp. 107-126; Ron Edmonds, "Effective Schools for the Urban Poor," Educational Leadership, October 1979, p. 22.

[79]See, for example, National Institute of Education, Research on Teaching: Implications for Practice, Conference Summary, summary of conference sponsored by National Institute of Education, organized by David C. Berliner, held in February 1982 in Warrenton, Virginia.

[80]Chicago Public Schools, Annual Desegregation Review 1983-84, Part II, pp. 64-95.

[81]"Boston Public Schools: Moving Up From the Nadir," Education Daily, 11 July 1984, pp. 3-6.

[82]These detailed plans specify steps that a school will take in five areas in which the system has promised to improve: preparation for higher education, basic skills achievement, improved attendance and retention, improved job preparation and parent and community outreach. See, for example, Dorchester High School, "1984-85 School Plan." (Mimeographed).

[83]Robert Schwartz, "The Boston Compact," paper presented at Symposium on Alleviating Youth Unemployment, Bonn, Germany, 13 October 1984. (Mimeographed.)

[84]"Moving Up from the Nadir."

[85]"Study Cites Value of Compact to Boston Schools: Fewer Absences and Higher Scores Found," Education Week, 12 September 1984; Private Industry Council, "Boston Compact Placement Status Report," Boston, 8 November 1984.

[86]Paul Berman et al., Improving School Improvement, A Policy Evaluation of the California School Improvement Program, Seminar I, How Schools View and Use the School Improvement Program: Preliminary Hypotheses (Berkeley, CA: Berman, Weiler Associates, 1981); Paul Berman et al., Improving School Improvement, A Policy Evaluation of the California School Improvement Program, Seminar II, Improvement, Maintenance and Decline: A Progress Report (Berkeley, CA: Berman, Weiler Associates, 1982).

[87]See, for example, Chicago Board of Education, Chicago Public Schools, Student Desegregation Plan for the Chicago Public Schools: Recommendations on Educational Components (undated), pp. 29-34, approved in January 1983; United States v. Board of Education of City of Chicago, 544 F. Supp. 912 (1983). Also, see Chicago Public Schools, Options for Knowledge, April 1984 for a description of special programs set up under the desegregation plan. See Note 89 and accompanying text for discussion of how these options programs create a two-tiered system.

[88]Chicago Board of Education, Student Desegregation Plan for the Chicago Public Schools, pp. 1-5, acknowledges a history of racial isolation of students in Chicago's public schools. United States v. Board of Education of City of Chicago, 544 F. Supp. 912 (1983).

[89]Chicago Public Schools, Options for Knowledge, p. 10, describes those options schools and programs within schools where admissions tests are required. While none of the other options listed state explicit selective entrance requirements other than interest, Designs for Change has found that the discretion afforded local schools in accepting students to their programs has led to formal or informal policies and/or practices under which many options programs "cream" off the top students. These policies and/or practices variously include consideration of prior academic performance, entrance tests, prior attendance records, prior discipline records, and teacher recommendations. As examples, the Austin Community Academy's Paideia Pilot program requires at or above grade level test scores and teacher recommendation; Jensen Scholastic Academy screens "for behavior"; Murray Language Center screens kindergarten applicants through use of a "primarily reading readiness test" and any students seeking admission after kindergarten must be t least on grade level; Lincoln Park's Fine Arts and Math and Science programs weigh elementary school test scores, prior attendance, prior achievement, and "attitude"; and Jackson Language Center screens through use of readiness tests.

[90]No report to the Court in the context of the desegregation case, no report from the Monitoring Commission for Desegregation Implementation, and no report from the Chicago Public Schools Office for Equal Educational Opportunity has systematically approached this issue. Indeed, there seems to be a lack of knowledge about what the admissions criteria even are, let alone whether they are appropriate. See, for example, letter to Donald R. Moore, Executive Director, Designs for Change from Robert C. Howard, Hartunian, Futterman and Howard, Chtd., attorney for the Board of Education in the desegregation case.

[91]Thus, for example, some "stably integrated," schools are comprised of an elite group of middle-class students with relatively few behavior or academic problems.

[92]General Bulletin #14, from Orpen W. Bryan to District Superintendents and Principals, September 20, 1982 states:

> All transfer students including students under the auspices of the voluntary desegregation plan become regular members of the school they are attending and are not unilaterally transferable. Once enrolled, the school is the student's "home" school.

The policy was reissued during the 1984-85 school year. The extent to which inappropriate student transfers are taking place in practice remains an open question.

[93]Moore, A Multi-Method Study of the Development of an Alternative High School Learning Environment.

[94]Walt Disney Magnet School, "Applications for Prospective New Students for the Walt Disney Magnet School," applications for admission for the 1985-86 school year. (Mimeographed.)

[95]See, for example, "Magnet Schools Called Successful Tools for Desegregation and Good Education," Education Week, 14 December 1983, p. 5, in which a U.S. Department of Education study titled, "Survey of Magnet Schools: Analyzing a Model for Quality Integrated Education," is cited for the proposition that magnet schools can and do provide high quality education without resorting to selective student admissions practices.

[96]If these programs are to be justified, they should be carefully scrutinized to make sure that they effectively serve the highly talented students who enter. These schools should demonstrate through objective evidence such as change in test scores and dropout figures that their programs have done a credible job in serving students.

[97]"Schools Lose Hold on Hispanic Students," Chicago Tribune, 11 November 1984, p. 1.

[98]Ann Grimes and Laura Washington, "Education at South Shore High: A $4.5 Million Flop," Chicago Reporter, September 1984.

[99]John I. Goodlad, A Place Called School: Prospects for the Future (New York: McGraw-Hill, 1984).

[100]See Note 78.

[101]See, for example, Ray Rist, The Urban School: A Factory for Failure (Cambridge, MA: The MIT Press, 1973).

[102]Chicago Public Schools, Recommendations of the Special Task Force to Reduce Dropouts, August 1981, p. 16.

[103]Grimes and Washington, "Education at South Shore High."

[104]See, for example, Christine Johnson, Chicago Public School teacher, testimony at Illinois Hearings, National Board of Inquiry on Schools, Chicago, 27 April 1984 (mimeographed); "High Chicago Class Size: Chicago vs. Suburbs," Substance, December 1984, p. 8; "Short Calling or Sub-Shortage?," Substance, December 1983, p. 3; "Short Calling Hit By Union, Principals, Subs," Substance, October 1982, p. 1.

[105]See Note 78.

[106]Chicago Public Schools, Report on 1974-75 High School Dropouts, November 1976; Chicago Public Schools, Recommendations of the Special Task Force to Reduce Dropouts, August 1981; Chicago Public Schools, Report on Dropout Reduction, December 1984.

[107]This phenomenon is exemplified by reactions of Chicago School Board members at the Instruction Committee Meeting on February 20, 1985. Board members questioned why the most recent Task Force report had been released to the public without their

having seen the report and scrutinized the report's recommendations, why there had been such a long delay in preparation of the report, and why they had never been shown copies of the 1981 Task Force report. Such questions from School Board members illustrate that staff were not employing a strategy aimed at gaining policy changes that would effectively address the dropout problem.

[108]Milbrey Wallin McLaughlin, "State Involvement in Local Educational Quality," in School Finance and School Improvement: Linkages for the 1980s, ed. Allan Odden (Cambridge, MA: Ballinger, 1983).

[109]Grimes and Washington, "Education at South Shore High."

[110]See, for example, Chicago Public Schools, "Report on the Retest Following the 1984 Citywide Test Administration in the Elementary Schools," December 1984. (Mimeographed.)

[111]William H. Wilken and John J. Callahan, "Disparities in Special Education Management: The Need for Better Fiscal Management," Legislators' Education Action Project, National Conference of State Legislators, 31 August 1976.

[112]"Rate Tops 36% Here," Chicago Sun-Times, p. 2.

[113]See Note 99.

[114]See, for example, Jane L. David and Susan M. Peterson, Can Schools Improve Themselves?: A Study of School-Based Improvement Programs (Palo Alto, CA: Bay Area Research Group, 1984).

[115]Orfield et al., "The Chicago Study of Access and Choice in Higher Education."

[116]See, for example, Morton Botel and JoAnn Tuttle Seaver, Literacy Plus (Washington, DC: Curriculum Development Associates, 1977).

[117]J.R. Berrueta-Clement et al., Changed Lives: The Effects of the Perry School Program on Youth Through Age 19 (Ypsilanti, MI: High/Scope Educational Research Foundation, 1984).

[118]National Coalition of Advocates for Students, Barriers to Excellence: Our Children at Risk (Boston, MA: Author, 1985).

[119]See Note 13 for data sources and methods of calculation of enrollment. See pp. 9-15 of this report and accompanying notes for a description of the calculation of High School Completion Rate.

[120]Ibid.

[121]See Note 13 for data sources and method of calculation of enrollment. See Note 18 for data sources for percent of seniors tested that read at or above the national average.

[122]See Note 13 for data sources and methods of calculation of enrollment. See Note 18 for data sources for percent of seniors tested that will graduate below minimum competency. See Note 20 for source of Minimum Competency Level criteria.

[123]See Note 13 for data sources and method of calculation of enrollment. See Table A-3 for explanation of estimated number of seniors reading at or above the national average. See text of this report, pp. 16-18, and accompanying notes for explanation of Percent of Well-Prepared Graduates.

[124]See Note 22 for explanation of method of calculation of dollars invested in the Class of 1984 over four years. See Table A-3 for derivation of number of Well-Prepared Graduates. See text of this report, pp. 20-21, and accompanying notes for explanation of cost of producing a Well-Prepared Graduate.

[125]See Note 13 for data sources and method of calculation of enrollment. See Note 18 for data sources for percent of freshmen that read at or above the national average.

[126]See Note 13 for data sources and method of calculation of enrollment. See Note 18 for data sources for percent of freshmen tested that will graduate reading below minimum competency. See Note 20 for source of Minimum Competency Level criteria.

[127]See Chicago Public Schools, Racial/Ethnic Survey - Students as of October 31, 1983 (undated) for racial and ethnic breakdowns. See pp. 21-22 of the text of this report for explanation of type of high school.

ACKNOWLEDGEMENTS

The principal authors for this report were Donald Moore and Sharon Weitzman Soltman. Ms. Soltman had primary responsibility for implementing the data analysis. Suzanne Davenport helped gather data used in the study. Michele Zimowski assisted with computer programming. Jennifer Keller and Dennis Gallagher prepared data for computer entry. The report was designed and produced by Jean Newcomer, Kathy Blair Yates, and Marilyn Lewis.