PREFACE

This Report is a product of Rand's study of performance contracting in education. The study is sponsored by the Assistant Secretary for Planning and Evaluation, U.S. Department of Health, Education and Welfare, under Contract No. HEW-OS-70-156.

Case Studies in Educational Performance Contracting comprises six volumes. Each is a self-contained study; together they provide a multifaceted view of performance contracting. The six volumes are:

1. R-900/1-HEW, Conclusions and Implications, by P. Carpenter and G. R. Hall
2. R-900/2-HEW, Norfolk, Virginia, by P. Carpenter
4. R-900/4-HEW, Gary, Indiana, by G. R. Hall and M. L. Rapp
5. R-900/5-HEW, Gilroy, California, by M. L. Rapp and G. R. Hall
6. R-900/6-HEW, Grand Rapids, Michigan, by G. C. Sumner

This study is the second of three Rand Reports on the subject. The first Report was J. P. Stucker and G. R. Hall, The Performance Contracting Concept in Education, The Rand Corporation, R-699/1-HEW, May 1971. The third Report will be a performance contracting guide intended for use by educational officials.
SUMMARY

Performance contracting is in itself an educational innovation, and the most innovative of the contracts is that between School City of Gary and Behavioral Research Laboratories. The program's uniqueness stems from two provisions: BRL is responsible for the entire curriculum at Banneker School, and the contract period is three years, with a fourth during which the contractor will transfer the program to the control of School City.

Although BRL is to develop the entire curriculum, contract payments are based on student achievement in reading and mathematics. For each student who is at national norms on a standardized test in reading and mathematics at the end of three years, BRL will be paid approximately $2400 (the average cost of educating a Gary student for that time). For students in the program less than three years, they will be paid approximately $800 for each year in which a one-year gain is made in those subjects.

The program as contracted envisioned the use of the well-known Sullivan programmed learning texts for reading and mathematics plus the development of materials for individualized instruction in other areas. In fact, development of these materials has lagged. Even by the end of the year, instruction in areas other than reading and mathematics was relatively conventional.

Although the program as it operated during the first of its four years did not achieve all its ambitious goals with respect to changing the teaching/learning process, its innovative features should not be minimized. The teaching/learning process
at Banneker is substantially different from that in the conventional school.

First, there is a much greater emphasis on materials. Second, there is more flexibility. Even if the program is not completely individualized, in the sense that each student starts at his precise level in each subject and goes as far and as fast as he is able at a pace he determines, it is still far less structured than the typical program. Students are moved from group to group at various times, not merely twice a year. There were three basic regroupings during 1970-71, and students also moved singly from group to group as they mastered materials. The school day is divided into 20-minute modules, a feature that permits an unusually flexible scheduling. There is also an unusually broad grouping of ages, and a faster movement of rapid-learners through the school.

In short, while it is not the completely individualized, unconventional curriculum for all subjects envisioned by the proposal and the contract, the program is an unusually flexible program featuring small-group instruction, a greater span of ages within groups, and differential staffing.

Naturally, the changes in the educational process are reflected in changes in cost. Compared with the conventional Gary program, the current Banneker program involves higher expenditures on materials, overtime, and administration, and lower ones on licensed teachers. The program during 1970-71 undoubtedly cost considerably more than the conventional Gary program, but we estimate that School City could operate a modification of the BRL program for less than 5 percent more than the conventional program.

The Banneker program conflicted with the State Board of Education rules or policy in six areas: the method for selecting the contractor, certification of teachers, use of state-approved textbooks, lines of authority within the school, pupil-teacher ratios, and curriculum. The first five conflicts were resolved satisfactorily, though at the expense of a great deal of effort and administrative furore. The last issue still remains a source of conflict between School City and the Office of the Superintendent of Public Instruction (OSPI).

The results at the year's end showed average gains of 1.7 achievement years in reading and also in mathematics for first-grade students. For grades 2 through 6, the average achievement gains were 0.7 for reading and 1.2 for mathematics. About one-third of the students were at or above the norms for their grade levels in both reading and mathematics. Since the program is under BRL's jurisdiction for three years, only the achievement of the sixth-grade students affected BRL's receipts in 1971. About a third of the sixth-grade students were at grade-level norm in both reading and mathematics.
Noncognitive impacts on students seem, on the whole, to be favorable. However, the decline in enrollment of about 100 students in the 1971-72 school year poses a question of how popular the program is with students and parents. There does seem to be a view on the part of knowledgeable parents and teachers that the program in 1970-71 did not sufficiently challenge exceptionally able students. This situation seems to have improved toward the end of the year, but the program’s effectiveness for those at the upper end of the achievement spectrum remains an open question.

Two features of the educational process at Banneker appear to be having district-wide impacts. One is the use of curriculum consultants. Under the new district organization there will be 21 curriculum specialists to work with classroom teachers.

The other is the emphasis at Banneker on special education support within the regular classroom organization, which also attracted the attention of Gary officials. There may be other attempts to provide special education within the regular classroom setting.

The history of the Banneker project to date has some broad implications for school districts considering a performance contracting program. First and foremost is the advantage of a multiyear program. If the Banneker program had been the usual one-year performance contract, most results of this year’s effort would be irrelevant. Under the Gary arrangement, BRL is in a position to restructure its efforts.

Another and related issue is that any performance contracting for other than reading and mathematical skills requires a substantial development effort. The Banneker program is pressing the educational state-of-the-art. Performance contracts that span a wide range of subjects are likely to encounter a lack of relevant materials and a lack of widely accepted achievement tests.

A third implication concerns the usefulness of performance contracting as an agent for inducing change and as a way of organizing demonstration and development projects. There is no gainsaying that Banneker is a significant departure from the conventional Gary school.

Finally, the Banneker program generated considerable friction and opposition. Future programs that substantially alter the educational process, and staffing levels in particular, are also sure to run into legal, administrative, and personnel difficulties. The Gary experience, however, suggests that patience and good will can resolve difficulties.

Whatever the final outcome of the Banneker program, it should go down in
educational history as one of the boldest and most interesting educational experiments in the United States. It deserves the attention of everyone interested in the current educational scene.
ACKNOWLEDGMENTS

We wish to thank our Rand colleague, S. H. Landa, who developed the computer programs used in the analysis of achievement data.

We gratefully acknowledge the cooperation of the staff of School City and BRL, who gave so generously of their time and supplied the documentation for this report. The wealth of material testifies to the extent of their assistance.

We are particularly indebted to Dr. Gordon McAndrew, Superintendent, Dr. Otha Porter, Special Assistant to the Superintendent, Dr. Haron Battle, Assistant Superintendent for Instruction Services, Mr. Frank Wade, Director of Special Education, and Mr. Clarence Benford, principal of Banneker School. Mr. George Stern, Mr. Donald G. Kendrick, Dr. Brian Fitch, and Mrs. Helen Mooney of BRL provided valuable information about their part of the program, as did Mrs. Esther M. Swanker of CURE.
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I. INTRODUCTION

In September 1970, Behavioral Research Laboratories of California (BRL) assumed jurisdiction over the entire curriculum at the Banneker School in Gary, Indiana. This performance contracting program is scheduled to last four years: three years of BRL instruction and one year to transfer the program to a completely in-house operation. The duration of the program and a private contractor's responsibility for an entire school make this program unique.

The announced agreement between BRL and the Gary Public Schools is simple: within three years, each student is to be brought up to the national grade-level norm on a standardized achievement test in reading and mathematics. If the student is at or above this norm BRL will receive about $2400 ($800 × 3 years); if the student is below the norm BRL will receive nothing. For a student in the program less than three years, BRL will be paid $800 for each year in which he advances a year in reading and mathematics. Since the $800 figure was announced to be the average cost of educating a Gary student, the program presumably will involve no additional cost to Gary.

The program was undertaken as a response to the problem of education in the inner city and the need for radical changes. Dr. Alfonso D. Holliday II, President of the Gary School Board, announced to the press: "We are at rock bottom and must try new approaches to educate our children."1

1 School City Press release, n.d. (July 1970?).
In actuality, the educational situation at Banneker, the nature of the "guarantees" given by BRL and its risk-exposure, and the cost of the program to Gary, are all much more complex than indicated in the description widely reported in the press and summarized above. This Report will go into these matters in much more detail.

We will deal with three basic issues: (1) the changes the Banneker program invokes in the educational process and how Banneker differs from conventional schools; (2) the achievement gains and other results of the first year of the program; and (3) implications of the program that might be generally applicable to performance contracting programs in other areas.

Section II describes the program's setting. Section III describes the program and the educational-process innovations. Section IV considers the challenges to the program from the Gary Teachers Union and the Indiana State Department of Public Instruction. Section V considers the educational product outcomes. Sections VI and VII review the Report's conclusions and implications. The appendixes reproduce the contractual agreements between BRL and the School City of Gary, and BRL and the evaluator, CURF (Center for Urban Redevelopment in Education).
II. GARY, INDIANA, AND THE BANNEKER CONTRACTED CURRICULUM CENTER

GARY, INDIANA

Gary was founded in 1906, when U.S. Steel built a steel mill on 22 acres of Lake Michigan sand dunes located 30 miles southeast of Chicago. U.S. Steel decided to name the mill and prospective town after its Chairman of the Board, Judge Elbert H. Gary. The mill cost the then-fantastic sum of $85 million. A subsidiary of the company, the Gary Land Company, spent $15 million constructing a town that was to be a model city. Unfortunately, instead of going down in the history books as a model of community planning, Gary is better known for labor problems during the early part of the century, and racial and social problems during more recent decades.

Today Gary has a population of about 182,000 living in an area of about 45 square miles at the edge of the Chicago metropolitan region, as shown in Fig. 1. Although there are over 135 firms in the city, U.S. Steel remains the dominant employer. About half of Gary's labor force of over 45,000 works for U.S. Steel.

Gary, it can be argued, is a paradigm of modern urban problems: air pollution, riots, crime, tax-base difficulties, decay of the downtown business district, and racial tensions. Gary has attacked these problems with unusual vigor, however. Mayor Richard G. Hatcher, one of the first Negro mayors of a major city, is an activist.

Politically, he heads a reform group that displaced the Democratic organization long in power in Gary. He and his administration have actively sought Federal support for renewal and have sponsored many programs aimed at urban and social improvement.

About 60 percent of Gary's population is black and there is also a large Spanish-surname community. Housing patterns and most social aspects of life are highly segregated. Issues of segregation and integration impinge on most public policies in Gary, notably on school policies.

Racial issues have beset Gary from the start. In the city's early days, the planned areas in the north of Gary developed by U.S. Steel came to be settled by relatively prosperous old-stock Americans. The area outside the planned portion, known as the Patch, housed immigrants from the south and east of Europe. As immigration declined, new workers, many black, were drawn from the South. The European immigrant groups moved to the southern part of Gary and the Patch became a black ghetto. Today, housing patterns make Gary extremely segregated racially and this segregation is increasing.

It is perhaps characteristic of Gary's interest in change that the Public Schools of Gary (the official name) rename themselves from time to time. The popular name, and the one used in this Report, is School City of Gary. The school board in 1971, however, emphasized its legal role as a corporation by designating the president of the board as chairman of the board, the superintendent of schools as corporation president, and the assistant superintendents as vice presidents.4

The Gary Schools enrolled 46,595 students in 1970, down from 48,431 students in 1968.5 There are about 2,200 professional staff members, about 1,000 of whom are elementary teachers.6 About 45 percent of the teachers are black. There has been a tendency for white teachers to be assigned to white schools and black to black, but the school board is committed to achieve an approximately 50-50 ratio of faculty by race in each school.

School City is headed by a five-man school board appointed by the mayor. Three members are black and one is a Mexican-American. The superintendent, Dr. Gordon L. McAndrew, is young, extremely personable, and committed to the need for educational change. McAndrew is white but seems to find it easy to work with the black

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1 Ibid., pp. 15-21.
4 "This is Gary, Indiana," School City, Gary, Indiana, p. 2.
leadership on the school board and within the wider Gary community. His contract was renewed for three years and his pay increased in the summer of 1971. McAndrew came to Gary from the Learning Institute of North Carolina, where he was director. Prior to that assignment, he had been a teacher and counselor in Oakland, California, and assistant director of the graduate teacher education program at the University of California at Berkeley.

School City had been organized in the hierarchical form shown in Fig. 2. In the spring of 1971 it was reorganized in a zonal system, as shown in Fig. 3. Some aspects of the reorganization can be regarded as a fallout of the Banneker program, as will be discussed later.

One of the new district administrators will be Dr. Otha Porter, who has been Special Assistant to the Superintendent; one of his responsibilities has been to oversee the Banneker program. Porter is young, able, black, and extremely knowledgeable about the community and political forces. His new assignment has shifted the line of program control.

Put differently, under the former organization, the line of cognizance and control over the Banneker program ran from the Superintendent through his assistant, Porter, and the Assistant Superintendent for Educational Services. Dr. Haron J. Battle, to the center manager and learning director at Banneker. Under the new organization, authority will run from the Superintendent to the District Administrator of District No. 3 to Banneker. Instructional, special, and psychological services that formerly were provided by School City headquarters will now come, at least partially, from District Administration headquarters.

The school organization plan provides for self-contained classrooms from kindergarten through 4th grade and modified departmentalization for grades 5 and 6. There are both junior high and senior high schools. Most elementary schools house grades 1 through 6, but in some instances the elementary grades are split between two schools.7

There are 33 elementary schools, 3 middle schools, 3 junior high schools, and 6 senior high schools, plus support facilities. Most schools are less than 10 years old.8 Gary takes great pride in the physical condition of its schools; they are attractive, well designed, and well maintained.

The student population is, roughly, 65 percent black, 9 percent Spanish-surr--

7 Ibid., p. 3.
8 Ibid.
Fig. 2—School City of Gary organization, 1969-70
DISTRICT ORGANIZATION OF ELEMENTARY AND SECONDARY SCHOOLS

DISTRICT #1
Phone: 586-3111 Ext. 216

Dr. Otis Porter, District Administrator
Dr. Imogene Jones, Supervisor of
Instruction
Mrs. Mary Fisher, Supervisor of
Special Services
Mr. Robert Solon, Psychologist

Acme - Miller  Marquette
Douglass      Noble
Duncan        Norton
Jefferson     Spaulding
Lincoln       *Garrett

DISTRICT #11
Phone: 9-962-1194

Mr. Glen McPherson, District Administrator
Miss Vera Hemingway, Supervisor of
Instruction
Mr. Sam Bianco, Supervisor of Special
Services
Mr. Robert Thomas, Psychologist

Bethany       Melton
Carver        Pittman-Glen Park
Drew          Riley
Dunbar         Webster
Franklin       Williams
Kunky

DISTRICT # III
Phone: **

Mr. Robert James, District Administrator
Mr. Clemens Peschke, Supervisor of
Instruction
Mr. Madison Williams, Supervisor of
Special Services
Mrs. Laverno Osmon, Psychologist

Ambridge      Ivanhoe
Bannaker      Locke
Beveridge      Pyle
Brunswick      Vohr
Chase          Washington

*Middle & Jr. High Schools
Phone: 986-3111 Ext. 264

Mr. Nicholas McDonald, Administrator

Beckley
Beckman
Edison
Froebel
Northeast
Pulaski
Tolleson

HIGH SCHOOLS
Phone: 586-3111 Ext. 257

Dr. Haron J. Battle, Administrator

Emerson
Mann
Roosevelt
Wallace
West Side
Wirt

*Reorganization being considered
**Presently administered by Haron Battle and Nicholas McDonald

APPROVED:

Gordon L. McAndrew
Superintendent of Schools

Fig. 3—School City of Gary organization, spring 1971
name, and 26 percent white.\(^9\) Despite serious integration efforts by the school system, the schools are highly segregated racially and becoming more so, as can be seen in Table 1. Almost 65 percent of Gary's black students go to schools where white students account for 1 percent or less of the student body. Almost 92 percent of the black students went to schools with less than 20 percent white enrollments. In the period between 1968 and 1970, Gary schools became more segregated as white families moved out of some neighborhoods, such as those around the Vohr and Mann

<table>
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<th>1970</th>
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<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Total enrollment</td>
<td>48,431</td>
<td>29,826</td>
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<tr>
<td>Black enrollment</td>
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<tr>
<td>Black students enrolled in schools with minority enrollment percentage of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-49</td>
<td>916</td>
<td>3.1</td>
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<tr>
<td>50-79</td>
<td>1,853</td>
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<td>80-89</td>
<td>1,710</td>
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<td>90-94</td>
<td>1,237</td>
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<td>95-98</td>
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<tr>
<td>100</td>
<td>9,652</td>
<td>32.4</td>
</tr>
<tr>
<td>Total</td>
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SOURCE: Taken from HEW News, HEW-A66, for newspaper release June 18, 1971, Table 3-A.

\(^9\) "Business-Run School Runs into Problems."
schools, that had been somewhat integrated. The schools on the east side of town tend to be white. Those on the west side primarily serve black and Spanish-surname populations.

McAndrew and the present school board have a penchant for innovation and change. Not only has performance contracting been initiated, but vouchers have been under study, the district has been reorganized, and other changes have been made. Some teachers feel that change is being sought for its own sake, and that the major result has been confusion. Others feel that Gary has stepped to the educational forefront. Either way, the performance contracting program in Gary was probably partly due to the publicly announced despair about student achievement, and partly due to the propensity of School City to pioneer new educational developments.

In sum, the Gary schools face many typical urban problems. Nonetheless, the city has some important untypical features. First, Gary remains a company town; U.S. Steel provides more economic and demographic stability for Gary than exists in many similar cities. Second, Gary schools are an example of the "community control" sought by minority groups in so many other areas. The black community is in charge not only of the school board but at the Gary City Hall. Third, and more intangible but still very important, the power structure within Gary strongly supports an activist stance toward social problems. Bold and innovative policies on the part of political and school leaders are valued. One of these innovations, strongly supported by the Gary leadership, is the performance contracting program at Banneker School, or to give it its formal title, The Banneker Contracted Curriculum Center.

BANNEKER SCHOOL (BANNEKER CONTRACTED CURRICULUM CENTER)

The press usually refers to Banneker as an "inner-city school." If this phrase conjures up a grim pile of bricks with barred windows located in a slum with uncared-for and unruly children, the phrase is very misleading. In the Gary context, "inner city" is merely a synonym for "black." Banneker is located in an area of well-cared-for single-family homes, some modest but others rather expensive. (Be-
cause of racial housing patterns in Gary, black neighborhoods tend to have a wider spread in income than white neighborhoods.) The Banneker neighborhood has a suburban flavor and has a low rate of turnover.

Banneker School is a neat and attractive building located on a large plot of land with oak trees and grass. It was built about 1957 and is the familiar one-story, rambling school with numerous windows.

Most fathers of the students work for U.S. Steel; since employment opportunities for women in Gary are scarce, an unusually large number of mothers are at home.

Banneker meets the criteria for Title I programs. About one-third of the students are from families that receive some welfare assistance. The educational problems associated with extremely low incomes such as inadequate diet, emotional disturbances, and the like are known, but these are not factors for most Banneker families. Discipline in the homes is strict; school classes and halls are orderly, and noise is restrained. The teachers are, for the most part, long-time residents of Gary with considerable tenure at, and pride in, Banneker School.

The school resembles most well-maintained, well-supported suburban schools with one exception: the student body and most of the faculty are black. We stress this point because from it follows an implication that has not received much attention.

The Banneker students have not been performing well on standardized achievement tests. Of Gary's 33 schools, Banneker ranks 31st on reading and math scores. The 1969-70 average sixth-graders performed at about the 4.5 grade level. If Banneker were a disorderly school with a demoralized faculty, at the bottom of the economic ladder, serving children coming to school without breakfast and from dismal slum homes, it would be easy to understand this academic performance. But Banneker does not fit this model. In fact, its low achievement scores are disturbing precisely because Banneker has a good faculty and plant, and draws students from an attractive and stable neighborhood.

**BEHAVIORAL RESEARCH LABORATORIES**

BRL is a well-known educational business firm with annual revenues of about $10 million. Its headquarters are in New York City and Palo Alto, California.
The history of BRL began with a Carnegie Foundation grant in 1960 to Dr. M. William Sullivan, a linguist, and Dr. Allen D. Calvin, a psychologist, to work on the learning process of the English language. This grant began work that led to the Sullivan Reading Program, a series of 20 workbooks and 92 supplemental readers that are the heart of a learning system called Project Read.\textsuperscript{11} BRL markets this programmed series and also has another series called Project Math. Project Learn is a broader, nongraded approach to individualized material that represents a third basic element in the BRL inventory. In addition to these materials, BRL offers to train teachers and paraprofessionals and will provide school support services, including public relations and other activities designed to engender community support and participation.\textsuperscript{12}

Dr. Calvin is now Chairman of the Board of BRL. George H. Stern was the President of BRL and the man responsible for the initial negotiations between BRL and School City, as well as for continuing overseeing of the Banneker program during 1970-71. Mr. Stern, a lawyer by profession, is young and strongly committed to the belief that educational change is essential. He spent considerable time in Gary during the first year troubleshooting the project.

The on-site project leader for BRL the first year was Donald G. Kendrick—also young, and a former systems analyst for the Lockheed Missiles and Space Company. Mr. Kendrick, though without formal degrees in education, had been involved in Lockheed's educational work, particularly in San Jose, California. He is committed to the benefits he perceives in replacing traditional teaching techniques and attitudes with a "systems approach" to learning.

As the first year of the program ended, Mr. Kendrick assumed corporate-level responsibilities and his role at Banneker was transferred to Dr. Brian Fitch. Fitch, also young, received his doctorate in educational administration and worked at the Upper Midwest Regional Laboratories before going to BRL.

BRL took on three performance contracts in 1970. The first was a large contract in Philadelphia: 15,000 students for reading at $600,000. To oversimplify somewhat, BRL essentially sold materials ordinarily costing $20.00 per set for $40.00 per set if a child advanced one grade on an achievement test in a year's time; if the child achieved less than a year's growth the cost to Philadelphia would be zero. BRL provided some supporting services, including training, but the Philadelphia pro-


\textsuperscript{12} Ibid.
gram has more the flavor of a warranty than the type of intensive corporate involvement in learning that BRL undertook in Gary.

The second BRL program, in Monroe, Michigan, involved about 200 children and about $8,000.
III. THE BANNEKER PROGRAM AND THE EDUCATIONAL PROCESS

INTRODUCTION

The Banneker program has changed and evolved since its inception, and it is continuing to change. Attempts to analyze the program by taking a "snapshot" view can be misleading. We outline here the major constant features, the way the program has evolved and is evolving, and the nature of the program at some major milestones. We shall examine the program (1) as it was proposed in June 1970, (2) as it was implemented in the fall of 1970, and (3) as it was operating in the spring of 1971. We shall also discuss future plans and costs and some district-wide spin-offs.

START OF THE PROGRAM

BRL had bid for the initial performance contract in Texarkana, Arkansas. As that project engendered more and more attention, it was natural that BRL would be interested in other applications of this technique. School City with its propensity to innovation was also attracted to performance contracting. The BRL-School City involvement came about naturally, since Gary had been using the BRL Sullivan
materials on an unguaranteed basis in five schools. School City officials were favorably impressed and particularly liked the in-service training connected with the program.

The story is told that the Banneker program began with a conversation between McAndrew and Stern in April of 1970 about educational accountability. McAndrew is reported to have proposed, half-jokingly at first, that BRL contract for a whole school on condition that the cost would not exceed the cost of a conventional program and that the school had to be a normal Gary school.13

BRL developed a proposal on this basis and in late July the Gary school board approved the program. In-service training started in August and the program was under way when school opened in September. The contract was not formally signed until September 22, 1970, however. The reason for this delay was that Gary was engaged in the first stage of a legal cold-war with the State of Indiana over the project. Gary finally went ahead on its own and signed the contract without formal approval by the State.

Three points about the start of the project are relevant. The first is that both parties "thought big." An entire school had never been involved in a performance contract; moreover, while BRL and Gary had had considerable experience with programmed materials in reading and math, materials for the other areas required substantial development and training efforts.

Second, there was no elaborate planning period or precontract phase with source-selection competitions and the like. The program was put together informally and speedily. The lack of the formal apparatus of a request for proposal, management support, and other formalities has been criticized, and School City's conformity to legal contracting requirements has been questioned. There are sound arguments for the formal approach, and in many future cases legal requirements may preclude emulation of the Gary procedure. On the other hand, School City wanted a highly innovative program, nobody really understood all that was involved in restructuring a school, and speed was of the essence if the program were to start in the fall of 1970. Given these conditions, the coalition approach involved and the procedures used are understandable.

The third point is that the essence of the project was restructuring an entire and existing school. One of the major features of the Banneker program is that the students in it were not specially selected. School City intended that Banneker under

BRL be composed of the same type of teachers and students that had characterized Banneker before BRL.

THE JUNE 1970 PROPOSAL

The proposal that BRL submitted to School City on June 1, 1970 stated that it sought an "alternative model" to the traditional urban school, which was both expensive and ineffectual. The "alternative model," in BRL's words:

... [has] the clear objective of raising each participating child to a specified level of academic achievement. The mechanism employed to achieve this objective is the temporary delegation of the total school operation to a private firm on a contractual basis.

The program would operate for three years, with a fourth year in which operation would be transferred from BRL to School City. School City would pay BRL the average cost of educating a Gary child.

Its alternative, BRL argued, would provide meaningful accountability because, among other reasons, a private firm could be discharged if it failed to perform to the satisfaction of the Board. An alternative was needed, according to the proposal, to prevent further increases in the cost of education and to deal with underachievement and other problems of urban schools.

BRL stated it would undertake seven tasks: First, to organize and staff a school. Second, to develop a curriculum in accordance with School Board standards. Third, to provide its own or other appropriate materials. Fourth, to train the staff to become a leadership cadre. Fifth, to "diagnose, prescribe, implement, and monitor an individualized educational program for each child." Sixth, to provide a community participation program. Seventh, to subcontract with an independent evaluator chosen in conjunction with School City.

16 Ibid., p. 8.
17 Ibid., p. 4.
18 Ibid., pp. 8-9.
As initially proposed (but later not adopted), all the Banneker staff was to be on the BRL payroll. The staff was to be headed and selected by the center manager provided by BRL, who would also select the learning director (principal).

A differential staffing arrangement was proposed, to consist of curriculum managers (master teachers) for each of five areas: reading and language arts, mathematics, social studies and foreign languages, science, and enrichment (arts and crafts, music, drama and physical education). They were to be selected by the learning director. The learning director and manager were to select fifteen assistant curriculum managers (teachers) and twenty learning supervisors (paraprofessionals). Three administrative aides and three custodians were also envisioned.

Curriculum and plans were to be developed during July and August by the curriculum managers, the learning director, an advisory council, and BRL personnel. August was to be devoted to in-service training and a vacation. The proposal stated that the BRL-Sullivan materials would “form the backbone” of the mathematics and reading curriculum. For other areas some subjects such as Black History were specified, and some general statements were made concerning such matters as the need for flexibility.

Although BRL proposed to implement a complete, innovative, and individualized program, School City’s payment and BRL’s guarantee applied only to reading and mathematics scores. BRL proposed to join with School City in selecting an independent evaluator to pre- and post-test students in reading and mathematics, using a standardized test. BRL offered to refund its entire fee of $800 per pupil per year for any student who participated in the program for three years and did not achieve at or above national norms.19

The basic concept was accepted by the Gary board, but some important changes were made before implementation.

THE PROGRAM, FALL 1970

The BRL-School City contract, reproduced in Appendix A, specifies 20 tasks: 9 planning, organization, and staffing tasks, and 11 operating tasks. For convenience, we list below the 9 planning, organization and staffing tasks:

BRL shall under supervision and control of the Board:

19 Ibid., p. 23.
1. Develop a curriculum in accordance with Indiana law and regulations and with standards adopted by the Board;
2. Meet with teacher, parent and community groups and conduct workshops and discussions in respect to administration, organization and curriculum development;
3. Conduct at least four community meetings in order to provide further information, determine parents' views and enlist support for the Center;
4. Conduct a training and development program for staff and community members in respect to the objective, philosophy and methods of student-centered instruction, differentiated staffing, non-graded curriculum and other techniques that will be used in the Center;
5. Establish curriculum objectives, physical and organizational arrangements of the Center, staffing assignments and patterns, and procedures for maintaining individual student profiles;
6. Arrange for the provision of instructional materials, supplies and equipment to be used in the Center;
7. Direct intensive pre-service training of staff, orienting the staff to the individualized student-centered approach to be used in the Center, including role-playing, sensitivity training, and individual interview techniques;
8. Provide manuals, films, video and audio tape equipment, and other materials required for staff development programs;
9. Prepare a yearly calendar of activities connected with the Center, including staff development programs, parent information and participation activities and a series of opportunities for other members of the Gary school community to observe and work in the Center.

A noteworthy departure from the earlier proposal was the emphasis on the Board's supervision and control and the requirement that the curriculum must comply with Indiana law. These clauses were to figure importantly in the challenges to the program by the Indiana State Department of Public Instruction. The emphasis on training and planning remained, even though the program began in August rather than July, and so planning and training time was limited.

Again for convenience, we list the 11 operating tasks:

1. Provide all instructional materials, equipment and supplies;
2. Use its best efforts to promote maximum student achievement in language arts and mathematics; utilizing appropriate techniques of instruction, such
as student-centered instruction, differentiated staffing, and non-graded curriculum;

3. Carry on intensive staff development and inservice training with both professional and paraprofessional personnel, utilizing latest techniques of staff development and emphasizing methods of formulating and achieving behavioral objectives, increasing achievement, and motivation of students and staff; improving work relations with colleagues and parents; and training personnel with a view to training them specifically in the methods and objectives of the Contracted Curriculum Center so that the Board may use such employees to operate the Contracted Curriculum Center after BRL has been phased out of the program during the fourth year of this agreement.

4. Diagnose, prescribe, implement and monitor an individualized educational program for each child;

5. Organize instructional activities around a number of learning centers to which children will go to develop particular skills, with staff members specializing in work of that center;

6. Use individualized instructional materials so that children progress at their own rates of speed, moving in and out of learning centers according to schedules set in consultation with staff members;

7. Direct the organization and control aspect of the Center, including arranging monthly evaluation of each child's progress and the transmission of this information to the instructional personnel; arranging supervision of attendance and discipline and establishing procedures that will seek to free instructional personnel from clerical and recordkeeping duties;

8. In cooperation with the Gary School Service Center, maintain all records and provide all information required by law.

9. Provide clerical, health, and day-to-day custodial services of a quality at least equal to that provided in the other elementary schools in School City. These services may be purchased from School City or contractors approved by School City. It is understood and agreed that exterior and interior maintenance and repair of the Center shall be performed by the Board.

10. Cooperate with School City in affording other School City teachers opportunities to visit and work in the Center as part of a city-wide staff development program;

11. Use its best efforts to implement an effective and meaningful community participation program, sending brochures and news letters to parents ex-
plaining the activities of the Center, disseminating news about the Center to local and national media, and providing parents with special materials to assist their children at home so as to stimulate learning and achievement.

This assignment has several noteworthy features. First, while the planning assignments discuss a "curriculum in accordance with Indiana Law" and the proposal discusses a number of studies, the only subjects mentioned are reading and mathematics. Second, the contract stresses the individualized nature of the program to be implemented.

Staffing arrangements are spelled out in a separate paragraph. The basic differential staffing arrangements and the numbers in each category are maintained; however, all School City employees remain on the School City payroll, and the Board reserves the right to approve the staff selected by BRL.

The contract calls for hiring an independent educational evaluator and an educational auditor.

Within this basic legal framework, a number of decisions had to be made in the summer and early fall of 1970. Selection of a school was an early requirement. Even though the project was funded from regular district funds and was not specifically a Title I enterprise, one criterion was that the school should be one of the 15 elementary schools that qualified for Title I aid. The second criterion was that the school's students should have low reading scores. Most of the 15 qualified on this basis. A more important consideration was neighborhood stability. A school with a low student turnover was sought so that at the end of three years enough students would have been in the program for the entire time to enable a good project evaluation. Four schools met all criteria, and Banneker was selected.

At the start of the program there was talk of designating another school as a control. This plan was dropped on the grounds that past results at Banneker could provide a comparison for the BRL program.

Transfers out of the school were permitted and transfers into the school on a first-come, first-served basis were also permitted. Since this was an experimental program, it was believed inappropriate to force any student to participate who did not wish to. Transfers in were allowed for two purposes. First, 1969-70 enrollment at Banneker had been 737, and at least 800 students were desired for the BRL program. After transfers, the official enrollment, measured for contract purposes on October 2, 1970, was 842.

A second reason for the open-enrollment policy was that the program received
considerable publicity during the summer of 1970 and numerous parents wanted their children in it. As several commentators have noted, their laudable enthusiasm carried with it the hazard of biasing the program's achievement results. Some Banneker teachers, including the principal, enrolled their own children in the program. A number of other children have well-educated, professional parents. For example, Dr. Alphonso D. Holliday II, a prominent physician and President of the School Board, enrolled his children. Some parents of above-average students apparently sought a program that offered more challenge than did the conventional Gary school. There was a real possibility, then, that transfers might have converted Banneker from an average Gary school to one with an unusually large number of gifted children.

On the other hand, a less-noted phenomenon also occurred. Many parents with children who were having trouble in school transferred them in the hope that the new program would produce improvements. These transfers should work in the opposite direction from the transfers of the former type.

The impact of transfers on student population will receive statistical analysis later. However, another effect of the transfer policy should be noted here. Banneker had good students in its program, and after the open-enrollment period perhaps even an unusually large number of able learners.

A point meriting emphasis is that, as a result of agreement between School City and BRL, no distinction was made between regular students and those eligible for special education classes. The former special education teacher was transferred to another school. The decision to place special education students in the regular program was viewed with misgivings by some School City officials.

Another early task was the selection of teachers and paraprofessional aides. Banneker school in 1969-70 had 32.5 staff members classified as follows (on the basis of man-year equivalents): 24 classroom teachers, 3.9 art, music, and physical education teachers, 1 reading teacher, 1 librarian, 1 social worker, 1 special education teacher, and a nurse at 0.6 time. In addition, there was a principal.

On the basis of a set of criteria developed by BRL and approved by School City, 5 curriculum managers and 16 assistant curriculum managers for the BRL program were selected from the 1969-70 faculty. The teachers were not involved in the development of selection criteria and did not know the basis for selection. The job descriptions are shown in Table 2. In cases where the substantive criteria did not determine a choice, seniority in School City and Banneker was used for selection. In Gary, building seniority is important to teachers, and the 13 transfers from Banneker were not taken lightly.
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Curriculum Manager</th>
<th>Assistant Curriculum Manager</th>
<th>Learning Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Experience or Training</strong></td>
<td>Applicant must meet Indiana State Regulations and have: 1. College degree in Education or in one of the five Contracted Curriculum Center curriculum parts. 2. Advanced degree in Education or one of the five Contracted Curriculum Center curriculum parts. 3. A minimum of six (6) years experience as a teacher and/or supervisor, working in elementary education. 4. Demonstrated knowledge of new concepts and methodologies in education which relate to individualization of instructional systems. 5. Demonstrated high leadership ability.</td>
<td>Applicant must meet Indiana State Regulations and have: 1. College degree in Education or in one of the five Contracted Curriculum Center curriculum parts. 2. A minimum of six (6) years experience as a teacher and/or supervisor, working in elementary education. 3. A demonstrated knowledge of new concepts and methodologies in education which relate to individualization of instructional systems. 4. Demonstrated high leadership ability.</td>
<td>Applicant must: 1. Have a minimum formal education of a high school degree. 2. Display a high degree of motivation to be involved in an innovative educational program. 3. Express an interest in the five part contracted curriculum design. 4. Display a willingness and character to work under supervision of a Curriculum Manager or an Assistant Curriculum Manager.</td>
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<table>
<thead>
<tr>
<th>Responsibilities</th>
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</thead>
<tbody>
<tr>
<td>1. Supervise the Assistant Curriculum Managers in the development of the assigned instructional system. This will include the formulation of the specific instructional and/or behavioral objectives and coordination of all instructional materials to meet those objectives.</td>
<td>1. Coordinate the resources of the assigned curriculum areas, i.e., materials, personnel and time, in order to provide for the most effective learning conditions for the students. 2. Provide support for the overall operations of the Center as described by the Center Director or the Learning Director. 3. Oversee and maintain proper learning environment.</td>
<td>1. Monitor students’ use of equipment and materials. 2. Assist in student evaluation in performing a given task that has been described in behavioral terms with a specific criterion. 3. Supervise activities such as listening centers, gaming, laboratory experiments, science or language arts resource centers. 4. Provide assistance to students assigned by the Curriculum Manager or Assistant Curriculum Manager in classroom instructions. 5. Be responsive to the assigned Curriculum Manager or Assistant Curriculum Manager in providing support for implementing the instructional system.</td>
<td>2. Direct and monitor the activities of the assigned Assistant Curriculum Managers, with the purpose of providing informal training and guidance in instructional techniques. 3. Coordinate the resources of the assigned curriculum areas, i.e., materials, personnel and time, in order to provide for the most effective learning conditions for the students. 4. Provide support for the overall operations of the Center as described by the Center Director or the Learning Director. 5. Oversee and maintain proper learning environment.</td>
</tr>
</tbody>
</table>
The transfers left 21 licensed teachers.\textsuperscript{20} In addition, 21 full-time learning supervisors (paraprofessional aides) were hired at rates of $1.75 to $2.05 an hour for a normal workday of 6 hours, 5 days a week.\textsuperscript{21} The job description is shown in Table 2. Three other part-time learning supervisors were also hired, recruited within Gary. Under a normal School City Title I program about 7 aides would have been hired.

The project substituted 21 aides and considerable materials for 13 certificated teachers. The disparity in salaries (a Gary teacher earns from $8,042 to $14,696 per year) between teachers and aides means that the new faculty arrangement involved a considerably lower personnel cost. Much of this cost savings was spent on materials. Viewed economically, the Banneker program substituted teaching materials and paraprofessionals for professional teachers. Viewed pedagogically, the program shifted the learning focus from teachers to materials. The approach was that "the materials do the teaching."

BRL had an opportunity unavailable to any other performance contractor. Other performance contractors have had to operate as a component within a school and adjust their program to the existing school organization. BRL was able to reorganize Banneker to provide the desired context for its program.

BRL's organizational approach is best described as nongraded, small-group instruction, with differentiated staffing. To start with the differentiated staffing, at the top of the Banneker organization chart were two administrators, the center manager and the learning director. The center manager at the start of the program was D. G. Kendrick, who was brought into the district by BRL and remained on their payroll. The learning director was Clarence Benford, who had formerly been a principal at Banneker but during 1969-70 had been principal at Williams School. The relationship between the center manager and the learning director, and their respective functions, were outlined in general at the start of the program; the manager was to be in charge of administration and the director was to be in charge of curriculum development. Details of responsibilities and relationships remained for definition as the program operated.

The learning director was assisted by various BRL consultants. Some of these were used for short periods of time for specific tasks, such as in-service training or community support development. Other consultants spent long periods of time in Gary and were actively involved in the school's operation.

\textsuperscript{20} Note that the original plan and contract specified 20 teachers.

\textsuperscript{21} One was later discharged.
On the teaching level there were five master teachers or "curriculum managers," to give them their formal title. Each was responsible for one of the areas of reading and language arts, mathematics, social studies and foreign languages, sciences and enrichment. In addition to their curriculum development duties, the curriculum managers also had teaching responsibilities. However, they were provided with substitute teachers so they could devote part of the week to developing new materials.

The other certificated teachers were designated as assistant curriculum managers. Classroom instruction was their primary responsibility. Each classroom also had a paraprofessional or learning supervisor.

The support personnel, such as the custodial force, remained as before. There was no social worker or special education teacher, however, and some of the other former special assignments were changed.

All personnel except the center manager and BRL consultants were on the School City payroll, and BRL reimbursed School City for personnel salaries and other expenses of the program.

Another decision that had to be made early in the program was the selection of an evaluator. Several firms bid on the job. The evaluator chosen was the Center for Urban Redevelopment in Education (CURE), headed by Dr. Bernard F. Donovan.

The initial program documents referred to an auditor. In current terminology, an educational auditor validates the evaluation design and the evaluation results. No auditor was appointed until the summer of 1971, when it was announced that Price Waterhouse and Company would audit the testing results. It is important to note that Price Waterhouse did not certify the evaluation design or examine the testing. Price Waterhouse, in its words, prepared a:

\[\ldots\] computation setting forth the net consideration for services rendered at Banneker School for the school fiscal year 1970-1971 provided under Sections 5 and 7 of the Agreement between Behavioral Research Laboratories and School City of Gary, Indiana dated September 22, 1970. This computation was prepared utilizing data obtained from certain financial, enrollment and attendance records of School City of Gary, Indiana.^[23]

^[22] Note that the new titles emphasize the place of materials in the Banneker program.

The ungraded feature of the Banneker program was emphasized by BRL. At the start of the year BRL personnel stressed this feature to the point of expressing regret that testing for evaluation resulted in students being grouped by what would be grades in a conventional program. BRL personnel indicated that in every respect possible they were trying to replace grade-level consciousness with a system of classification based on the material the student was mastering. In fact, however, at the end of the year students still identified themselves in terms of the grade-level system. Nonetheless, there was a great effort to do away with the typical school system of six grades. In place of grade-grouping, a series of small groups organized around various materials was instituted. The day was organized on the basis of 20-minute modules of instruction. Within a classroom, children could move from group to group for instruction in various aspects of a subject. Also, as a student mastered a given body of material he could be moved into a new group rather than having to wait for a semester break.

The program at the start was almost exclusively devoted to reading and mathematics. The program was organized around the Sullivan series of programmed workbooks and materials. The students referred to use of these materials as "programming."24

This concentration appears to have two explanations. One is that the program, as the contract indicates, envisioned a heavy emphasis on basic skills, particularly early in the program. Not only was skill-proficiency the basic goal, but skill improvement was seen as necessary for improvement in other areas.

A second explanation also seems important. BRL had materials that enabled at least an approach to individualization of reading and mathematics. Comparable materials in other areas did not exist. BRL proposed a program based on reading and mathematics materials that had been developed (over more than a decade) plus materials for other areas that were to be developed. Moreover, these materials were to be developed during the summer of 1970 and while the program was being implemented. Since most of the summer was spent getting the program under way, and the period in which a new program is being installed is not the best time for development work, it would be surprising if much attention could have been given to new materials in other areas.

24 For some people, performance contracting has become so linked with highly mechanized learning systems that it is perhaps useful to mention that the Banneker program made little use of teaching machines. A language laboratory with some audiovisual equipment was in operation in the mornings, and from time to time groups or individuals would be scheduled in the lab for special instruction. With the exception of this laboratory, the program is a "paper and pencil" system.
The program envisioned a strong community involvement program. Substantial effort was put into this phase. For example, after it was found that parents did not like to come to evening meetings for fear of car theft, a watchman was hired for PTA meetings. Generally, the parents were sympathetic to BRL's stress on basic skills. They were much less sympathetic to BRL's views on discipline.

The Gary schools are quite strict about student deportment. Teachers carry yardsticks while monitoring the halls and playgrounds. Principals administer corporal punishment for infraction of the rules. The parents support this posture; indeed, a number of them we talked to would like to see even stronger discipline in the schools, with teachers empowered to administer spankings, for example. At the start of the program BRL announced there would be no physical punishment. The parents objected so strongly to this policy that it had to be reversed and, as in the conventional Gary school, the learning director at Banneker administers corporal punishment. The parents were not prepared to accept BRL's approach, which BRL regarded as "humanistic" and the parents regarded as "permissive" (see Sec. V).

Report cards were another difficulty. BRL originally planned to use a very complete document describing in detail the progress of the student through the assigned materials. Difficulties in developing such an instrument, and parental confusion about how to interpret the reports, led to a simpler but still distinctive document. The report card uses a marking system based on the rate of skill acquisition. The card for language arts and related subject matter is shown in Fig. 4.

THE PROGRAM, SPRING 1971

In addition to the evolutionary changes that went on throughout the program, decisions were made during the Christmas break affecting staffing and teachers, curriculum and materials, special education, and administration.

Staffing and Teachers

There were more certificated teachers at Banneker during the spring semester than were envisioned the preceding summer. As of June 1971 there were 23.5 certificated teachers plus two substitutes assigned full-time. The substitutes filled in for the curriculum managers 1/2 day each week to permit them time to develop
Parent Signatures
1. 
2. 
3. 
4. 

Parent/Manager Comments

BANNEKER
CONTRACTED CURRICULUM CENTER
SCHOOL REPORT
1970-71

Donald G. Kendrick, Center Manager
Clarence L. Benford, Learning Director

Name ____________________________
Homeroom ____________________________
Language Arts Group ____________________________
Entry Book ____________________________
Present Book ____________________________ 1 2 3 4

Fig. 4—BRL's report card for Banneker
<table>
<thead>
<tr>
<th>LANGUAGE ARTS</th>
<th>Period</th>
<th>SOCIAL HABITS</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>1</td>
<td>Shows respect for classmates</td>
<td>1</td>
</tr>
<tr>
<td>Spelling</td>
<td>2</td>
<td>Shows respect for adults</td>
<td>2</td>
</tr>
<tr>
<td>Written Language</td>
<td>3</td>
<td>Follows rules without direct supervision</td>
<td>3</td>
</tr>
<tr>
<td>Listening</td>
<td>4</td>
<td>Takes care of property</td>
<td>4</td>
</tr>
<tr>
<td>Speaking</td>
<td></td>
<td>Meets trying situations cheerfully</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is self-confident</td>
<td></td>
</tr>
<tr>
<td>SOCIAL SCIENCE</td>
<td></td>
<td>WORK HABITS</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td></td>
<td>Pays attention</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td></td>
<td>Listens with understanding</td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td>Follows directions</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
<td>Can work alone</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td></td>
<td>Tries to do his best</td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td></td>
<td>Keeps his work neat</td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td></td>
<td>Completes tasks</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
<td>Cleans work area</td>
<td></td>
</tr>
<tr>
<td>ENRICHMENT</td>
<td></td>
<td>Uses his time to good advantage</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Explanation of Markings:
- ✔️ is acquiring skills above preferred rate
- ✖️ is acquiring skills at preferred rate
- ✗️ is not acquiring skills at preferred rate
- ✗️ No observation
materials. Since the paraprofessional complement had not declined, the cost of the program to BRL must have increased substantially during the year. On the other hand, the involvement of BRL consultants had declined. In addition to the center manager there were two full-time BRL consultants; while occasional part-time consultants were involved, they were used much less than at the start of the program.

The faculty had felt that their opinions were not respected, and morale had dropped to a very low point in December. Conscious efforts were being made by School City and BRL to remedy this condition.

**Curriculum and Materials**

Social sciences and science were being taught. The time allocation among subjects remained somewhat different from the conventional program. More time was devoted to reading and mathematics than in the typical Indiana school.

The materials used in other subjects were conventional texts and the instructional techniques were also relatively conventional. In addition to the Sullivan materials, the major texts used were those published by the American Association for the Advancement of Science and Science Materials, the Allyn and Bacon Social Studies Program, and *Man, A Course of Study*.

**Special Education**

The notion of a single curriculum for all students assigned to the school was partly amended. A specialist in special education was assigned to Banneker in midyear to work with designated children. Most of the special education children attend regular classes all or part of the day, however. This practice represents a significant innovation for Gary and will be discussed at more length later.

**Administration**

A number of administrative changes had taken place. In place of the original hierarchical line organization, a team approach was substituted involving the center manager, learning director and two consultants. The curriculum managers also came to be regarded as part of the top management and assumed considerable authority. The five curriculum managers make up the Curriculum Committee, which is a management group. As of the spring of 1971 it deliberated on and passed
on practically every school decision. To an outsider it seemed that many of the matters they considered might appropriately have been delegated to the learning director or center manager. Apparently, however, a feeling that they were neglected in the fall has led the curriculum managers to resist any delegation.

Significantly, both in public announcements and in actual fact the direct cognizance, control, and responsibility of School City was clearly established. The authority of McAndrew, Battle, Porter, and Benford over the program was no longer in doubt.

FUTURE PLANS

The prime task, according to BRL spokesman, is curriculum development. Attempts were being made in the spring of 1971 to organize a summer effort with the objective of producing a fully individualized curriculum. A particularly important aspect of the summer effort was involvement of the curriculum managers. The aim was not only to insure that all concerned had an appreciation for the practical problems of individualized instruction, but also to build support for implementation of the program.

In the late spring of 1971, BRL assigned some of its consultants the task of developing objectives for the language arts and mathematics curricula. BRL appreciated the difficulty of writing good behavioral objectives and preferred to have experts in the field do it, rather than the teachers at the school. During the summer (1971) the curriculum managers were assigned the task of developing what they call learning activity sheets. For each program objective, there is a choice of material a child can study to attain it. Each learning activity sheet specifies the material, and when the sheets are completed and filed, the child can go to the file, look at the sheet, and know what material to get in order to work toward that particular objective. This has the incidental advantage of making the child an active participant in managing his own learning experiences.

Work also is continuing in social studies. Here, consultants did not develop the objectives, but the curriculum managers are working with the objectives as they are specified in the series of books and texts that cover the social studies curriculum. In science the materials used are the AAAS series. Curriculum managers are devising additional activities that can be used in attaining objectives, and have an opportunity to become more familiar with the science material. The instruction will not
be as highly individualized as in the language arts and math curricula.

A modification in the staff assignments has also been made for the 1971-72 year. During 1970-71, two long-term substitutes had been attached to the school so that the curriculum managers could be freed from classroom activities in order to have some time to develop new material. The math resource teacher next year will be Mrs. Ford, the head of the math department. Mrs. Mooney, who was a full-time BRL consultant during 1970-71, will act as a resource teacher in language arts. Mrs. Ford will work with other teachers in the morning and meet classes in the afternoon; Mrs. Mooney will not teach any classes, but will be available at all times as a resource teacher, and will have other duties in connection with managing the BRL program.

COSTS

What are the costs of the Banneker program? This simple question turns out to be difficult to answer. In this section we shall discuss four points in some detail. First, the $800 figure commonly used is misleading. Second, no one knows or can know the total resources expended this year on the Banneker program. Third, the structure of the project precludes a rigorous cost-effectiveness comparison between the Banneker and conventional Gary instruction. Fourth, the probable incremental cost for Gary to conduct a program like the Banneker program is low compared with a conventional program.

The basic cost figure usually cited is $800 a year for each student. School City will pay BRL $2400 for each student reading at national norms after three years. For students in the program for less time, they will be paid $800 a year for each student who shows a grade level of growth per year. The $800 figure was determined by averaging the cost of education for Gary students. Actually, BRL receives the anticipated annual per-pupil average daily attendance (ADA) expenditure costs for grades 1 through 12. To be precise, the contract specifies:

In consideration for all services rendered pursuant to this agreement, the School City shall pay BRL the anticipated annual per pupil ADA current expenditure costs, grades 1 through 12, as taken from Form 9A Annual Financial Report of Indiana State Superintendent of Public Instruction times the active enrollment as of October 30 for Banneker School, plus any reimbursement the Board receives from Federal authorities for compensatory services BRL has, is or will provide at the Center.
In the fall of 1971, Gary began using a cost figure of $830 per student instead of the $800 figure. School City officials stated this was still about $100 or 10 percent less than the average cost of $924 per student on a city-wide basis. 25

The $830 figure was derived as follows. The average per-pupil average daily attendance (ADA) payment for Gary was $924.40. This was multiplied by the Banneker enrollment of 798 (842 adjusted for half-day kindergarten) and the cost of clerical and custodial services was subtracted. The result was regarded as the Banneker instruction costs. This figure was divided by 798 to get the per-pupil cost of $848.74. Then the refund for the sixth-grade students who did not achieve a month-for-month gain in reading and mathematics was subtracted. This refund amounted to $74,689.12 (88 times $848.74). This refund brought the per-pupil cost down to $830.80.

Note that only the refund for the sixth-grade students was used in the computation. At the end of three years the proportioned refund might be larger or smaller depending upon how many pupils are at grade-level norms.

Some other aspects of this computation should be noted. One is that Banneker's costs are compared with all Gary ADA costs rather than with the probably lower costs of Gary elementary schools. BRL is paid the average cost for grades 1 through 12, although grades 1 through 6 are usually less expensive than higher grades. The average for grades 1 through 6 in Gary is probably not $800, but around $700. 26

Also, BRL receives payment for all students enrolled on October 30. Indiana pays funds to Gary based on average daily attendance. Since ADA will generally be less than enrollment, BRL may receive more than Gary will receive from the State for Banneker students.

If BRL brings all Banneker students up to norm level, School City's expenditures on Banneker will likely be higher than before, perhaps by as much as 20 percent. 27 If BRL does not bring all students up to the national norm, its payments will be reduced. Mecklenburg and Wilson, who are the source of the 20-percent additional cost estimate, point out that 80-percent success is the break-even point. If only 79 percent of the students reach the national norm, the Banneker program

25 The $830 figure is the Price Waterhouse computation of the payment from School City to BRL called for by the contract. "School City of Gary Reports Success at Banneker School," press release, n.d. (September 28, 1971), p. 3.

26 Ibid. However, there is considerable variation among schools in cost, so it is conceivable that the pre-1970 cost of Banneker could have been closer to $600 than to $700. No one really knows the pre-BRL cost of Banneker.

27 Mecklenburg and Wilson, op.cit., p. 408.
will cost School City less than the conventional Gary school program. Since an
80-percent success rate would be a very substantial accomplishment, it seems proba-
bile that the cost of the BRL program to School City will be less than for a conven-
tional program. Of course, the $830 figure is merely the expected School City
payment. The total cost of all resources devoted to Banneker this year is unknown
and unknowable. Certain expenses appear on the monthly statement form shown
in Fig. 5.

Note that while some of the expenses are direct charges, BRL's share of School
City's maintenance, overhead, and similar expenses is simply charged as a percent-
age of ADA current expenditure costs. Whether these charges accurately reflect the
Banneker burden is an open question. Also, School City advances 20 percent of the
payment, which provides BRL with working capital and spares it some of the ex-
 pense of financing the Banneker project.

More serious than these accounting issues is the question of how much extra
cost has been put through the BRL books in connection with the Banneker program.
No one outside BRL will ever know, since the company has taken the position that
its costs are proprietary information. Moreover, even if one were to have access to
BRL books it is unlikely that a good estimate could be made. The problem would be
to allocate cost between the Banneker program and BRL's development and market-
ing efforts. BRL has viewed the Banneker program as a prototype and as a chance
to demonstrate its capabilities to a wide audience. BRL undoubtedly expended con-
siderable resources for corporate-wide purposes, that transcended the Banneker
effort.25

A third problem is that even if one knew what Banneker actually cost, it would
be impossible accurately to compare the costs with those of a conventional program
in order to obtain a good cost-effectiveness analysis. The School City accounting
system operates on a responsibility basis. Costs are identified only for centers of
authority over costs. Principals have almost no authority over costs; therefore only
costs of a few supplies are broken out by school. Therefore when Gary wanted a
figure to use in connection with its performance contract it was forced to use the
average for the entire system.

24 BRL's refund provision does not apply to students in attendance less than 150 days in any year.
Thus, the ADA payment of these students means that even with an 80-percent success the program might
cost School City more than previously.

25 An additional problem would be to identify "waste." We were told by one authority that BRL
wasted $100,000. We said, "You mean it was unnecessary." The authority replied, "No, I mean wasted, just plain wasted."
MONTHLY STATEMENT OR CLAIM
BRL (Banneker School) Contract

Month____ Year____

(Based on Contract: Section 5 Consideration)

Gross Consideration for Month____ Year____ $__________

LESS: Annual Current Expenditures** paid by School City of Gary for Month(a)____ Year____:

(a) Employee salaries:
    Principals  $__________
    Certified Personnel (teachers) $__________
    Teacher Aids or Para Professionals $__________
    Secretarial or Clerical $__________
    Custodial $__________
    Matrons $__________
    Nurse $__________

(b) Fringe benefits, employer retirement contributions, employer taxes, and other employer contributions $__________

(c) Custodial supplies and materials $__________

(d) Laundry and dry cleaning costs $__________

(e) Utilities: Water $__________
    Electricity $__________
    Fuel $__________
    Telephone $__________

(f) Vandalism detection services $__________

(g) Insurance costs $__________

(h) 2% of Gross for Administration, overhead and Business Services $__________

(i) 3.2% of Gross for Maintenance $__________

(j) Materials Required by Law (see 5BJ) $__________

(k) Office, secretarial supplies, including postage $__________

Subtotal $__________

LESS: Excess of Current Expenditures carried over from previous monthly statement $__________

Net Consideration due BRL $__________

* For September, see Section 5A. (Estimate of $600 x 800 pupils x 20%)
  for October through May, see Section 5B.
  For end of year adjustment for 1972, 1973, and 1974, see Section 5C.
  For end of contract adjustment in 1974, see Section 5D.

** See Section 5A.

School City's Statement — deduct no annual Current Expenditures.

October's — deduct July, August, & September Annual Current Expenditures.

November's — deduct October Annual Current Expenditures.

:  :  :

May's — April Annual Current Expenditures.

After July 30 end of year adjustment — deduct May and June Annual Current Expenditures.

Fig. 5—School City Monthly Statement Cost Form
In connection with the BRL contract, the School City computer program was changed so that Banneker costs were identified and reported separately. After the cost-allocation factors for overhead and similar expenses had been negotiated between BRL and School City, it was then easy for the computer each month to print out Banneker costs. However, there are no cost figures for a comparable school. At one time there had been a plan to have a control school for the experiment. This plan was dropped on the grounds that the past experience at Banneker could be used for statistical purposes. This approach is perhaps adequate for comparing achievement, but since there are no past Banneker cost figures a comparison school would have been very helpful for resource and cost analysis. In the absence of such figures, estimates have to be rather crude.

We have prepared cost estimates for three Banneker-like programs. One is a conventional Gary type of program, one a system like that BRL has installed at Banneker, and one is a hypothetical program of the sort that might be run as an in-house program based on the BRL model. We emphasize that we do not have precise cost figures since none exist. Moreover, what we have called a BRL-type program is not intended as an exact facsimile of the current Banneker program. We have examined a number of School City cost data, however, and are convinced that the figures in Table 3 are representative of costs, and that the programs are reasonable models of alternative school organizations in Gary.

Gary prices have limited relevance for other districts, and even in Gary they change from month to month. The resource figures are more important—the number of teachers, custodians, etc., required for different programs. However, for expositional purposes it is easier to reduce diverse resources to the common denominator of dollars. We emphasize that these are hypothetical costs based on our own estimates.

Let us examine Table 3 line by line. The conventional program uses one principal per grade school. The BRL program essentially has two top administrators. We have assumed salaries of $18,000 for one and $20,000 for the other. In the modified program we have assumed one man could handle the job since much of the development work would be complete. The salaries assumed may be somewhat high but this type of program places unusual demands on administrators and we assume they will receive a high pay. We have made no allowance for the time of assistant superintend-

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Table 3
SANNEKER COST ESTIMATES
(Costs in $)

<table>
<thead>
<tr>
<th>Item</th>
<th>Conventional Program</th>
<th>BRL Type of Program</th>
<th>Cost Increments</th>
<th>Modified In-house Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Cost</td>
<td>Number</td>
<td>Cost</td>
</tr>
<tr>
<td>Administrators (principals)</td>
<td>1</td>
<td>18,000</td>
<td>2</td>
<td>38,000</td>
</tr>
<tr>
<td>Curriculum consultants</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>30,000</td>
</tr>
<tr>
<td>Licensed teachers(^d)</td>
<td>32.5</td>
<td>357,500</td>
<td>25.5</td>
<td>280,500</td>
</tr>
<tr>
<td>Paraprofessionals(^b)</td>
<td>7</td>
<td>15,500</td>
<td>20</td>
<td>50,000</td>
</tr>
<tr>
<td>Clerical</td>
<td>2</td>
<td>12,000</td>
<td>3</td>
<td>18,000</td>
</tr>
<tr>
<td>Custodians</td>
<td>6</td>
<td>36,000</td>
<td>6</td>
<td>36,000</td>
</tr>
<tr>
<td>Food service</td>
<td>4</td>
<td>9,000</td>
<td>4</td>
<td>9,000</td>
</tr>
<tr>
<td>Lunch matrons</td>
<td>3</td>
<td>-2,600</td>
<td>3</td>
<td>2,600</td>
</tr>
<tr>
<td>Fringe benefits and other labor costs(^c)</td>
<td>90,120</td>
<td>92,820</td>
<td>92,820</td>
<td>+2,700</td>
</tr>
<tr>
<td>Overtime</td>
<td>10,000</td>
<td>60,000d</td>
<td>10,000d</td>
<td>+50,000</td>
</tr>
<tr>
<td>Consulting, travel and extra office costs</td>
<td>3,000</td>
<td>10,000d</td>
<td>10,000d</td>
<td>+10,000</td>
</tr>
<tr>
<td>Textbooks and instructional materials</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>0</td>
</tr>
<tr>
<td>Miscellaneous services(^e)</td>
<td>0</td>
<td>20,000</td>
<td>20,000</td>
<td>+20,000</td>
</tr>
<tr>
<td>Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>603,720</td>
<td>706,920</td>
<td>706,920</td>
<td>+103,200</td>
</tr>
</tbody>
</table>

\(^a\)Assuming average salaries of $11,000 per year.
\(^b\)Aides started in the fall of 1970 at rates from $1.75 to $2.05 an hour for a six-hour day. At midyear pay rates were increased to $2.15 to $2.75 an hour.
\(^c\)Computed as 20 percent of wages and salaries.
\(^e\)Library books, supplies, utilities, etc., plus 5 percent of ADA for administration, maintenance, and other overhead.
ents and other school executives at the school-system headquarters level. A new program may well be very demanding; however, we have treated these costs as properly chargeable to the school system as a whole rather than to individual school programs.

A feature of the current BRL program has been the extensive use of consultants. We have assumed that two full-time consultants at a cost of $15,000 per year each are involved under a BRL-type of program. Since these personnel are very important in a materials-oriented program, we have retained them in the in-house program. Some small use of short-term consultants is also reflected in later figures. We retained the $15,000 to be conservative. School City is paying for a similar post, regular salary plus $1,000.

The third line, licensed teachers, is the most interesting. Note that the $77,000 saving here is the one cost reduction that is set against the many other cost increases involved in the change from the conventional program to a BRL type of program. One can easily see what the addition of an extra 4.5 licensed teachers during the 1970-71 school year did to the costs of the program. For the modified program we have assumed that the program could operate with the current 25.5 licensed teachers plus the two curriculum consultants. We have used an average salary of $11,000, which is somewhat above the average salary of Gary teachers. Our choice reflects the fact that this type of program is more demanding than the conventional program. We have used the same salary figure for all three programs, however. Perhaps it would be more realistic to assume a slightly lower salary figure for the conventional program. The reader may make any adjustments he wishes.

Since paraprofessionals are relatively inexpensive, adding 13 aides increased costs by only $34,000. The cost of paraprofessionals could increase sharply and thus increase the cost of a BRL-like program.

The normal clerical complement is two, but we have assumed three clerks for the BRL-like program and two for the modified program. All other support personnel are assumed to be unchanged under the three programs.

Note that the conventional and BRL-type programs are about equal with respect to wage, salary, and other labor cost although the composition of the labor costs differs under the two programs. However, the modified program cost is assumed to be less by the wages, salaries, and fringe benefits of one principal and one clerk.

Overtime is a major item. The current Banneker program has a number of after-school programs, Saturday meetings, and other out-of-school activities. Curriculum managers, assistant curriculum managers, and learning supervisors are paid overtime. The union agreement with School City provides for overtime. The
standard School City practice is to pay overtime for such duties at $3 per hour. BRL pays overtime at the average hourly rate of the employee, which may be as much as $8 or $10 per hour. This has the effect of giving Banneker teachers higher take-home paychecks than teachers in other schools receive.\textsuperscript{31} The overtime activities are also important for meeting BRL’s commitments to enrichment and community involvement.

More important for the present topic, the overtime greatly increases program costs. For the BRL-type program we have used Efrem Sigel’s estimate of $60,000.\textsuperscript{28} The $10,000 figure for a conventional program is largely arbitrary and probably an overestimate, since Gary is in a budget crunch and overtime is probably limited. The Wall Street Journal states that, with overtime, "A teacher can earn as much as $3,000 a year extra boosting earnings to around $13,000 per year."\textsuperscript{33}

BRL has made extensive use of consultants and there has been frequent travel between BRL’s home office and Gary. The $10,000 figure is also from Sigel and seems conservative to us, but we use it here. We have included a modest $5,000 in the modified program to cover occasional consulting on curriculum or other parts of the program, inservice instructors, and the like.

It is hard to estimate the cost of the materials. We have used a $10,000 figure for the BRL type of program. We have also included $10,000 per year in the modified program, which is equivalent to assuming all supplies are consumable. This is something of an overstatement, but we prefer to err on that side rather than to assume too much reuse of materials. The $3,000 figure for the conventional program may be somewhat low. In some other districts, $1.60 per subject per pupil seems to be the rule. For four subjects and 800 students, this would put expenses around $5,000. To be conservative we arbitrarily use $3,000.

Miscellaneous services consist of the direct charges levied by the central administration on the individual schools plus indirect charges for overhead, maintenance, etc. In all three programs we have assumed an equal amount of miscellaneous expense.

The final cost item is for evaluation. The cost of the CURE evaluation is paid for by BRL. The cost has not been publicly released but we have estimated it at $20,000 per year. Note that we have also included some evaluation expense in the

\textsuperscript{31} As will be discussed, the Gary Teachers Union has asked questions about how the recipients of overtime were determined.

\textsuperscript{28} Sigel, op. cit. (See footnote (d), Table 3.)

modified program, but only half as much. We think it likely that an in-house program would devote less effort to evaluation, based on current profits.

Since we tried to be conservative and err on the high side, the totals are probably somewhat higher than they should be. Moreover, the middle column is a BRL-like program and not the actual BRL program. Nonetheless, the figures do suggest several features.

First, examining the conventional program, it would appear that the cost of education at Banneker before the BRL contract was probably somewhat less than the $800 publicly announced. It appears, however, that it was probably higher than the $700 figure used by some commentators.

Examining the figures for the BRL program, one has the impression that even if all the 800-plus children in the program are reading at the norm in three years, BRL is going to lose some money. On the other hand, not all the children will be included in the guarantee. Moreover, if BRL is successful with a substantial proportion of students it is not going to lose much money. Also, many of the expenses of the program this year should be charged off to BRL's product development efforts.

The final column is the most interesting and significant. Comparing it with the first column suggests that for less than 5 percent more in cost (3 percent if the figures justified such precision), Gary could mount an in-house program similar to that currently in operation at Banneker. This conclusion assumes no major change in paraprofessional or materials costs. It also assumes that the experience gained during the experimental stage will be vested in the school, so that not as much top management will be required. Even with these caveats, however, our conclusion seems striking.

BRL is undoubtedly spending a considerably greater amount at Banneker than School City spent last year. The costs of the modified program have an interesting implication for the present BRL program at Banneker. It suggests that if it chooses to do so, BRL might reduce operating costs substantially.

DISTRICT-WIDE SPIN-OFFS

When one attempts any large-scale experiment with innovative educational processes, a hoped-for result is district-wide spin-offs. A particular hope for perform-

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34 In May 1971 the President of BRL was stating that BRL would break even in Gary. See "Three R's, Inc.," and compare Sigel, op. cit.
ance contracts is that they will be change-agents for improvement in the teaching process. In Gary we have identified two spin-offs.

**District Reorganization**

One result of the Banneker program was to influence the district reorganization put into effect in the spring of 1970. Under the reorganization, outlined in Fig. 3, there will be four districts. Each district will have seven curriculum assistants. These will be certificated teachers who will receive their regular salaries plus $1,000. Their job will be to assist classroom teachers in the assigned schools. Apparently, the model for this arrangement is the way BRL used curriculum consultants in its program. Recall that there have been at least two full-time consultants at Banneker working with the classroom teachers. This practice seems to be spreading.

**Special Education**

One of the basic guidelines established at the start of the program was that the program should include all children assigned to Banneker. This was interpreted at the start of the program to be a single curriculum for all students, including the children who formerly had had separate classes with a special education teacher. The special education teacher was reassigned, and those pupils that would formerly have qualified for separate classes were assigned to groups along with all other students.

This procedure was looked upon with some misgivings both by some Banneker teachers and some special education specialists. Frank E. Wade, Supervisor of Special Education, told us that he personally doubted that the plan would work. In fact the original intentions had to be modified, but the modified result is still so innovative—and has been so successful—that Wade told us he has changed his thinking about how to approach education for children with learning handicaps.

The revision of the special education program came in January 1971. Wade and Mrs. Alpha S. Rogers prepared a very thorough report on special education at Banneker. They identified a number of students with special needs of various types and made five recommendations, which were implemented.35

1. More social work time.
2. Speech therapist added to staff.
3. One teacher for those students recommended for placement in special class.
4. In-service program for teachers relating to social and/or learning problems and/or behavior problems.
5. Planned program for group therapy for parents of children who are presenting learning and/or behavior problems.

The former Banneker special education teacher was recruited back to Banneker on March 4, but instead of once more working with the special education students in special classes, her main responsibility is working with them in their regular classrooms. A few of the most seriously handicapped pupils receive separate instruction, but for the most part the special education teacher is an addition to the regular teaching program instead of a substitute for it.

Wade believes that Banneker's ability to handle most special education activities within the framework of the normal program is a most significant outcome of the Banneker project. He believes that it has important implications for the theory and practice of special education.

SUMMARY

The Banneker program was initially envisioned as an opportunity to see how much improvement in cognitive attainments a contractor could accomplish if he were able to restructure an entire school and its curriculum. Gary insisted that the program involve an "actual" school without selection of a special group of students and teachers. To a considerable extent these basic ground rules were carried out.

BRL contracted for a complete, individualized curriculum in accord with Indiana laws. Both BRL and School City, however, heavily emphasized the development of basic reading and computational skills. The payments are based on the number of pupils that in three years are at or above national norms on standardized tests of reading and mathematics. The program as contracted envisioned the use of the well-known Sullivan programmed learning texts for reading and mathematics, plus the development of materials for individualized instruction in other areas. In fact, development of these materials has lagged. Even by the end of the year, instruc-
tion in areas other than reading and mathematics was relatively conventional.

The preceding paragraph raises the question of the extent to which the objective of a completely individualized curriculum has been realized. The best answer would appear to be "partly." The programmed materials for reading and mathematics seem quite successful for an individualized approach to basic skills. The program lagged, however, in providing enrichment materials for those who had mastered the basic skills, but it appears that this difficulty had been at least partially remedied by the spring of the year. In social studies and science, individualization was considerably less than in reading and mathematics.

Although the program as it operated during the first of its four years did not achieve all its ambitious goals with respect to changing the teacher/learning process, its innovative features should not be minimized. The teaching/learning process at Benneker is substantially different from that in the conventional school.

First, there is a much greater emphasis on materials. Instead of the 32.5 teachers at Banneker during 1969-70, there are 25.5 teachers, 21 paraprofessionals, and more instructional materials. Students are grouped in classes not on the basis of age or grade level but on the basis of materials. To a considerable extent the titles given the teachers, curriculum managers, and assistant curriculum managers accurately reflect the increased importance of materials at Banneker and the role of the teacher in developing and using materials.

Second, there is more flexibility. Even if the program is not completely individualized, in the sense that each student starts at his precise level in each subject and goes as far and as fast as he is able at a pace he determines, it is still far less structured than the typical program. Students are moved from group to group at various times, not merely twice a year. There were three basic regroupings during 1970-71, and students also moved singly from group to group as they mastered materials. The school day is divided into 20-minute modules, a feature that permits an unusually flexible scheduling. There is also an unusually broad grouping of ages, and a faster movement of rapid-learners through the school. To illustrate, in one arithmetic class we visited in May there were children 5, 6, and 7 years old. The three 8-year-olds had been moved in from kindergarten, and had been in the class one, two, and three months, respectively. The group works on the Sullivan books 1 through 7.

Her language arts class, the teacher explained, had an even wider range. It included children aged 5 through 8. Two of the 8-year-olds were almost 9, and in a conventional school would be in a special education class. She had an unusually
large number of students in that class because several students had moved from the kindergarten class into her grade during the year, and fewer had moved out. Also, at the last general regrouping she had seven slower students whom she knew well and whose problems she understood. She had requested that they remain under her instruction.

In short, while not the completely individualized, unconventional curriculum for all subjects envisioned by the proposal and the contract, the program is an unusually flexible program featuring small-group instruction, a greater span of ages within groups, and differential staffing. There is an extensive use of programmed materials for reading and mathematics.

Unlike most other performance contract programs, the BRL program is to run for three years, enabling BRL to profit by this year’s experience and continue the curriculum development process. An individualized curriculum remains the goal.

Naturally, the changes in the educational process are reflected in changes in cost. Compared with the conventional Gary program, the current Banneker program involves higher expenditures on materials, overtime, and administration, and lower ones on licensed teachers. The program during 1970-71 undoubtedly cost considerably more than the conventional Gary program, but we estimate that School City could operate a modification of the BRL program for less than 5 percent more than the conventional program.

The program has had at least two potential district-wide educational process spin-offs. One is the assignment of curriculum specialists to the newly formed subdistricts. The other is more teaching of special education students in regular classroom environments.
IV. CHALLENGES TO THE BANNEKER PROGRAM

INTRODUCTION

Any instructional arrangement so atypical as a performance contracting program will run into questions about its conformity to legal codes, regulations, agreements, and established practices. The Banneker program is extremely instructive on this point because it was challenged by both the Gary Teachers Union Local No. 4 of the American Federation of Teachers, AFL-CIO, and by the State of Indiana. Since both complaints were subjected to formal review, the objections and decisions were spelled out in specific detail and documented.

THE GARY TEACHERS UNION CHALLENGE

Background

Gary has a long-established American Federation of Teachers chapter. There is a formal employment agreement between Local No. 4 and School City. More generally, Gary is a strong union town. That being the case, it is perhaps surprising that Gary should be the locale for the most far-reaching performance contracting pro-
gram to date, involving involuntary teacher transfers, differential staffing, contractor involvement in classrooms, and other practices to which teacher unions object. Three points about the Gary situation help to explain this anomaly.

First, there is no state law in Indiana specifically giving teachers the right to bargain collectively and to go to court to enforce the resulting contract. The Agreement between Local No. 4 and School City is precisely that—an agreement. Its legal status is somewhat ambiguous, and therefore the legal power of the AFT in Gary is less clear than in other areas, such as Michigan.

Second, Local No. 4, like all other responsible Gary institutions, wrestles with the implications of its actions for the Gary racial and social situation. A program that purports to offer black students a leg up is not lightly opposed even if it flies in the face of strong AFT principles.

The third point is that Local No. 4 was tactically outflanked. A voted strike was postponed in the belief that the complaints would be resolved through other avenues but, in fact, School City made no explicit concession to Local No. 4. Perhaps the Gary Teachers Union expected that State action would make the matter moot. In any event, union action was too little and too late. The program evolved in such a way, however, as to make it much more acceptable in the eyes of the union, but this evolution was not greatly influenced by Local No. 4 action.

**History of the Dispute**

The Gary Teachers Union states that it first heard about the BRL-School City plans in the spring of 1970, but had no firm details until the plan was announced at the School Board meeting on July 14, 1970. At that meeting McAndrew referred to future negotiations with the union, and a letter sent by Benford on July 20, 1970 to Banneker teachers also spoke of discussions with Local No. 4. The union claims these discussions were never held.

In the fall of 1970, the union was publicly citing five objections to the program.

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36 This history is drawn from interviews, some confidential, with a number of people on various sides of the dispute. While their information is much appreciated, they will not be cited by name. Among the documents on this dispute, a particularly helpful source is the *Award and Opinion of Arbitrator John F. Stembower, Gary Teachers Union, Local No. 4, AFT v. Gary School Board of Trustees of the School City of Gary, Indiana*, Case No. 51-39-0443-70, Grievance No. 1-70 (hereinafter cited as *Grievance 1-70*).

37 Ibid., p. 3.

38 Ibid.

39 Ibid.
In a September communication to its members it listed the elements it did and did not object to. In the words of Local No. 4's newsletter these were:

**BRL Elements Which Do Not Violate the Union-Board Agreement**

1. Pupils not assigned to grade levels.
2. Extensive use of 'softback' programmed materials.
3. Pupils' progress at individual rates.
4. Employment of paraprofessionals.
5. Parent involvement.
6. Staff in-service training.
7. Emphasis on passing nationally standardized tests.
8. Emphasis on reading and mathematics.
10. Use of outside "specialists" and "resource consultants."

**BRL Elements Which Do Violate the Union-Board Agreement**

1. Staff allocation (10 more teachers are needed).
2. Forced transfers (13 teachers transferred out using BRL criteria).
3. Use of paraprofessionals (at salaries below the poverty income level) who serve as teachers.
4. Teachers at the BRL school can be transferred to another school upon 15 days' notice.
5. Single Salary Schedule (teachers will be paid at "differentiated" rates).

The first four elements in the right-hand list are self-explanatory, but the fifth requires a word. The union reasoned that the use of two levels of teacher responsibility and two schedules of overtime, plus BRL's ability to promote or demote teachers from one group to another, amounted to a hidden merit or incentive pay system. They argued that the program violated the Local Board No. 4-School City Agreement by deviating from the single salary schedule provisions.

In later months the union stopped citing items 3 and 5 as violations. Moreover, we were told that the union regarded item 1 as more serious than items 2 and 4.

At the July 14th meeting of the Gary School Board, and at meetings on August 27 and September 22, union representatives argued that the BRL-School City contract would violate the Local No. 4-School City Agreement. School City took the position that if the union had a complaint it should file a formal grievance and utilize the grievance procedures specified in the Agreement. At a meeting with McAndrew on October 1, 1970, Gary Teacher Union representatives took the position that the

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violations were clear and no grievance procedure was required to identify them. Moreover, it argued, since under the grievance procedures the School Board represented the district in the final stages of the in-system grievance procedure, the appearance by the union at three board meetings rendered the grievance procedure moot. Nonetheless, at the October 1 meeting, and subsequently in a letter dated October 5, 1970, to the President of the School Board, Local No. 4 offered to submit a grievance if the Board would agree to utilize an arbitrator and abide by his decision.

On October 6, Dr. Holliday, the President of the School Board, replied that the School Board viewed a binding arbitration as illegal and outside the scope of its Agreement with Local No. 4. The Board, Holliday stated, had to retain responsibility for policy and could not relinquish it to an arbitrator. Holliday again urged the union to utilize the conventional grievance route.

On October 9, the president of the Gary Teachers Union, Charles O. Smith, wrote McAndrew that the union had voted to strike unless School City would take one of two actions. The first option was to eliminate "...any and all violations of the 1970-1971 Union-Board Agreement, including the staff allocation provisions and the transfer provisions, as well as violations of the spirit and letter of other provisions of that Agreement..." The second option was to agree to carry out an independent arbitrator's recommendation.

Holliday responded the same day with a letter agreeing to a meeting with Local No. 4 representatives, and Smith replied, concurring. Holliday reiterated the Board's desire that the union use the grievance procedure.

What happened at this point is not well documented, but we are informed by those in a position to know that considerable pressure from leading citizens was exerted to avoid a strike. In any event, the strike did not occur, and Grievance 1-70 was filed on October 21.

The grievance alleged three basic violations. First, the reduction in certified staff at Banneker and the increase in the pupil/teacher ratio were alleged to violate the Agreement provisions about class-size. Second, the involuntary transfers were alleged to be in violation of Agreement provisions. Third, the 15-day involuntary transfer rule instituted in the BRL-School City contract was alleged to be in viola-

tion of the Agreement. The Agreement provisions alleged to have been violated are reproduced in Table 4.

On November 3, McAndrew responded in a letter to Smith. With regard to the 15-day transfer rule, McAndrew stated that no teacher had been transferred under the rule and that if a personnel problem arose a number of different courses of action were available to School City. Since the choice among these actions could not be forecast, and since no transfer had yet occurred, McAndrew rejected that particular grievance on the grounds that it had no basis in fact.

The transfers of the 13 teachers at the start of the program, according to McAndrew, were due to a change in the type of course offered at Banneker. McAndrew held that this reason was specified by the Agreement. Moreover, he stated that the Agreement required that a grievance be filed 30 days from the date of the pertinent act. The transfer letters were dated August 21, 1970. Therefore, McAndrew concluded that the October 21 grievance was untimely.

A somewhat more conciliatory approach was taken to the pupil-teacher ratio issue. McAndrew stated:

As to class size, Banneker does not have classes as such. The method of grouping used at Banneker was not contemplated in the language of our Collective Bargaining Agreement. Furthermore, more than twenty paraprofessionals are present at Banneker. Also, the teachers remaining at Banneker have signed up for the program thereby indicating their assent to the unusual groupings.

Nonetheless, the letter went on to state that in the interest of resolving the matter McAndrew was willing to accept Smith's interpretation. However, he pleaded with the union to be cognizant of the need for improving inner-city schools and to be aware of the promise of the Banneker program and to permit it as an innovation. He concluded:

Let's give the Banneker program a chance. In that spirit, I ask the Gary Teachers Union to give its support to this new approach and to join with the administration and the School Board in a careful evaluation of the results.

McAndrew's plea was not accepted and the grievance finally reached the advisory arbitration stage. There was some sparring about arrangements but finally, in late December of 1970, the American Arbitration Association designated an arbitrator. The procedure that the AAA used was to have School City and Local No. 4 each
### Table 4

**GARY TEACHER UNION-SCHOOL CITY AGREEMENT PROVISIONS**

#### ARTICLE VIII. TRANSFER PROCEDURE

H. When a position which is, or becomes, open for which two or more teachers who are equally qualified have requested a transfer, length of service in the School City shall be the determining factor in effecting the transfer. When only one qualified staff member applies for a transfer to an open position, he shall receive the transfer. If the vacancy occurs within the school year it may be filled according to the procedures above ten days after the vacancy has been posted in each building or it may be filled temporarily until the end of the year at which time it will be filled from applicants on file ten days after the vacancy has been posted in each building according to the procedures outlined above.

K. Involuntary transfers shall receive priority over all other transfers and new hires and shall be made only when necessitated by the opening of a new building, the closing of an old facility, or when a change in course offerings or a reduction in pupil enrollment necessitates a reduction in staff.

#### ARTICLE XIV. CLASS SIZE

**A. Class Size Goals**

1. It is recognized by the Board and the Union that it is desirable to control class size through both reduction of pupil-teacher ratio and the establishment of maximum class sizes.

2. It is further recognized that as a desirable goal class sizes in the various grade levels and instructional areas should not exceed the following limits:

   - Primary (K-3) .................. 24
   - Elementary (4-6) ............. 26
   - Secondary Regular Classes
     - Junior High .................. 28
     - Senior High ................ 28
   - Secondary Laboratory Classes 26
   - Special Education
     - E.M.I., Handicapped ........ 15
     - Emotionally Disturbed ...... 8
     - Secondary Physical Education 36

3. It is recognized that the desirable maximum class sizes cannot be achieved during the next school year, but the School City agrees to continue efforts to make regular annual class size reduction.

#### B. The allocation of teachers for the duration of this agreement shall be based on the guidelines developed by the Department of Instruction, dated December 28, 1967.

#### C. Class Size Maxima

1. The average city-wide size of regular academic classes in the School City of Gary shall not exceed 29.

2. **Elementary School**

   In any elementary school the average size of classes shall not exceed 30. In calculating this average IDR, Special Education and other such small groups shall not be included.

   In a team-teaching arrangement, class size shall be determined by computing the student-teacher ratio for the total number of students assigned to the program.

   a. In the primary grades (K-3) of any school the average size of classes shall not exceed 32. In no case shall any given class exceed 33.

   b. In the intermediate grades (4-6) of any school the average size of classes shall not exceed 32. In no case shall any given class exceed 34.

#### ARTICLE XXXV. LOCAL CONDITIONS AND PRACTICES

A. Written board and personnel policy now in existence covering established practices of employees covered by this Agreement and/or established local working conditions or practices in effect as of the date of this Agreement which are not inconsistent with this Agreement shall not be changed without agreement of the parties.

B. The established local working conditions or practices clause of this Agreement shall be interpreted to include the meaning that no provision of this Agreement shall permit changes in established working conditions or practices in any given building except when these changes constitute an improvement in the working conditions and practices in effect in the building as of the date of this Agreement.

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**SOURCE:** Agreement Between the Board of School Trustees of the School City of Gary, Indiana and Gary Teachers Union, Local No. 4, AFT, February 1, 1970 through December 31, 1971, pp. 17, 32, 50, 51.
rank the designated candidates. The AAA then added together the two sets of rankings and selected the candidate with the lowest score.

As it turned out, this procedure resulted in selecting the candidate ranked first in preference by Local No. 4 and last in preference by School City. School City's attorneys at this point notified the American Arbitration Association that while it made no criticism of the individual designated, it regarded any selection procedure that yielded such a result to be unfair. School City, therefore, according to its counsel, refused to participate further.

The AAA rejected School City's protest and scheduled an arbitration session for January 20, 1970. When only the union appeared, the session was adjourned until January 25. School City was unrepresented at this latter meeting and so the arbitration was held ex parte. The Decision and Award, handed down February 19, supported the union in all major contentions and recommended the relief it sought.

The Decision and Award was apparently ignored by School City. Changes occurred, particularly in the number of certified teachers at Banneker, that made the program less objectionable to the union, but these changes do not seem to have been greatly influenced by the events just recounted.

**The Decision and Award**

Arbitrator John F. Stembower's Decision and Award is instructive per se and also as a possible precedent for actions in other school districts. The main features will be briefly summarized.

In the review of the issues with which he began, Stembower reviewed the Gary Teachers Union-School City dispute. He did not limit himself merely to labor-management issues, but explored the educational nature of the Banneker program, BRL's educational qualifications, and the dispute between School City and the Department of Public Instruction of the State of Indiana.

The concern about the educational character of the program was reflected in his findings of fact and law. First, Stembower agreed that the nature of the program changed the local conditions and practices referred to in Article XXXV and therefore should have been the subject of Local No. 4-School City negotiations. Since the union had no legal power to sue, the union's main weapon to try to implement the Award had to be public opinion: "Teacher's Union Won," *Gary Post-Tribune*, March 1, 1971. However, public opinion regarding Banneker was largely on the side of School City.

"Grievance 1-70, pp. 9-10.
decision held that the union had tried to bring its views before the Board and therefore the grievance was timely. Stembower also concluded that the union’s position was reasonable and not merely obstructionist:

Nor should it be assumed that the Union in this matter is taking a “stick in the mud” attitude of simply opposing new teaching ideas for the sake of their newness. There is nothing in this record to indicate that BRL has any touchstone of success for teaching reading and mathematics. Certainly the utilization of unlicensed teachers to the extent of 25 percent of the faculty is not a step in the direction of enlightened improvement of instruction. Nor does it appear from the backgrounds of these unlicensed teachers and the unlicensed Project Manager that they possess any noted expertise in the very areas which BRL professes such competence.  

Later, in dealing with the legal implications of a possible conflict between the BRL-School City contract and the Local No. 4-School City Agreement, Stembower invoked the doctrine of “public policy” and held that the latter Agreement should have priority because it was likely that the BRL-School City contract was illegal. To quote the Stembower decision:

There is grave doubt that the BRL Agreement meets the requirement of contract law for being in accord with “public policy” and “not being illegal.” The requirements of licensure of teachers no longer are open to judicial question. The courts have long ago settled the proposition that the profession of teaching is so affected with the public interest that licensing is an appropriate exercise of the state’s power. Anything which tends to debase the learned professions is at war with the public interest and contrary to public policy.  

And later:

... it appears clear, therefore, that a school board cannot delegate to a private organization, such as BRL, the performance of a governmental function, including licensure of teachers, the use of state approved instructional materials, and the meeting of all the requirements of statutes and rules and

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46 Ibid., p. 10.
regulations relative to education. . . .

In view of the foregoing, there seems to be grave doubt that BRL has an enforceable contract with the School Board, and that therefore if the School Board finds itself in a dilemma of having agreements which are antagonistic to each other, the provisions of the Agreement with the Union are valid and subsisting and should be carried out.\textsuperscript{47}

Two other findings are important. The involuntary transfers were held to be in violation of the Agreement because the specific reason for the transfer was not listed in the Agreement. The doctrine of \textit{expressio unis est exclusio alterius} was invoked. The view that course offerings had changed was rejected on the basis that the BRL-School City contract states that curricula would not be changed.

Second, the decision held that: "The teacher-pupil ratio is completely out of kilter under the BRL operation, and this violated Union Agreement provisions . . . ."

A final procedural point is important. Stembower held that the Union could protest even though the BRL-School City program had not been completed. The doctrine of anticipatory breach of contract was cited to supporting this finding.\textsuperscript{48}

\textbf{Comments}

The most obvious comment is perhaps also the most significant. Any program that substantially changes school staffing arrangements will concern teachers and is likely to lead to strikes or other personnel problems. The facts that in Gary the called strike was cancelled, that School City was able to refuse to participate in an advisory arbitration, that the arbitration award apparently had little impact, and that the Gary Teachers Union became more or less reconciled to the program as it progressed, should not be taken by other districts as a precedent. School City’s ability to prevent union opposition from having much effect on the Banneker program generally reflects conditions peculiar to Gary, the way the program came about, and the way it developed. In other locations, or in Gary at other times, a teacher organization may well be in a better position to exert opposition.

Secondly, of the three complaints put forth by the union, the impact on the pupil/certified-teacher ratio was far the most important in the eyes of the union. The threat, in its view, was that performance contracting would lead to substitution of

\textsuperscript{47} Ibid.

\textsuperscript{48} Ibid.
noncertified employees for teachers. As the number of teachers assigned to Banneker increased and approached the more conventional level, and as the Gary teachers came to the conclusion that the Banneker program was not likely either to spread far within the Gary system or become the standard personnel-staffing model, opposition to the program greatly lessened.

One interesting aspect of the grievance and the arbitration was that no attention was given in the decision to paraprofessional aides. The union took the position that the desired staffing level at Banneker was not affected by the use of paraprofessionals and this view was strongly supported by Stembower. The personnel issues raised by the extensive use of noncertified aides at Banneker and Local No. 4’s involvement with them will be discussed later.

Without attempting a detailed legal analysis of the Stembower decision, several comments seem pertinent. The first concerns the union complaint about the change in class sizes at Banneker. The Gary Teachers Union’s complaint really raises two issues: the propriety of a unilateral change in the ratio by School City, and the efficacy of the change itself. These two issues are intertwined in the Stembower decision.

With respect to the propriety of a unilateral change, on the face of the matter it would seem that the union had a legitimate complaint. The Local No. 4-School City Agreement set standards for class sizes and it is implied that teachers would hold the proper certificates. A program that resulted in any substantial deviation would appear to be a proper subject for union-management negotiation. McAndrew’s view—that since there are no classes at Banneker, the Agreement was not breached—seems beside the point.

The desirability of a School Board boxing itself into a specified pupil/teacher ratio is a different matter. From an economic standpoint the BRL program represented a substitution of lesser-trained labor, plus materials, for more highly trained labor. It would seem that any school board should be free to experiment with various resource-input combinations in an effort to decrease the cost of instruction or increase its effectiveness. From a pedagogical point of view, the BRL program represents a shift of educational focus from teachers to materials. Again, educational emphasis would seem to be a proper subject for School Board decisions. To preclude such actions through labor-management contracts seems a dubious practice.

The union would appear to have a strong case that, given that School City had agreed to certain class sizes, the union had a legal right to have a certain number of positions for certified teachers at Banneker. It is far less convincing to argue that as a matter of public policy, a ratio of pupils to certified teachers should not be
decreased below existing levels. The empirical evidence that educational performance drops as the number of certified teachers per pupil drops is neither extensive nor powerful. Moreover, to prevent school boards from having a say about how to combine resources in education contradicts the basic political theory behind school boards.

To the extent that the Gary experience is relevant for other districts, it suggests that performance contracting programs that substantially increase the pupil-teacher ratio are likely to run into opposition that those programs with conventional ratios will not encounter. The Gary experience also indicates that questions concerning a program’s educational desirability, learning theory, and classroom approach are likely to become intertwined with the personnel aspects of the program in disputes about the program. Thus, the acceptability of the program to teachers is likely to depend not only on how it affects their employment potential, but also on how they view the program’s educational potential.

The transfer issue was probably more important in Gary than it is likely to be in other districts, because building seniority is especially highly prized in Gary. Stembower’s decision is unpersuasive on this point. It rests on the narrow technicality that the agreement did not specifically list BRL-like programs as a reason for transfer. To the layman, the kind of major reorganization involved in the Banneker program would certainly seem to come within the spirit of Article VIII(K)’s permission for involuntary transfers due to “a change in course offerings.”

The same reasoning, however, provides support for the union’s third contention, to wit, that the conditions of employment had been changed by the BRL contract—particularly the 15-day involuntary transfer position—without the benefit of collective bargaining. School officials in other districts that have performance contracting programs have taken the position that as long as hours of work, pay, and like variables remain unchanged, the provisions of union contracts are fulfilled and collective bargaining is not required. This theory has never been tested in the courts but even if it is accepted, it seems hard to believe that it could be extended to cover the BRL-School City contract and the transfer provision.

McAndrew’s contention that since no transfer occurred no grievance occurred may or may not be correct as a matter of labor law. However, several knowledgeable observers told us that this rule inhibited Banneker teachers from commenting and protesting and generally had a chilling effect on teacher-BRL relationships at Banneker. If this view is true, and it seems at least plausible, the mere existence of the rule and its deterring effects would seem to be a subject for a grievance even if the deterrent had never been exercised.
Conclusions

With respect to the Gary Teachers Union's opposition to the Banneker program, when all was said and done, more was said than done. The ineffectiveness of Local No. 4's opposition, however, was due more to local conditions than to anything inherent in performance contracting. Other districts may well have conditions that permit more effective teacher opposition.

The heart of Local No. 4's opposition was the impact of the program on pupil-teacher ratios. However, the question about the program's educational desirability became confounded with the issue about the conflict between the Local No. 4-School City Agreement and the BRL-School City contract. This confounding is likely to occur in any program.

From a legal standpoint, the most persuasive argument on the union's side, in our opinion, was that the program changed working conditions and these changes had not been the subject of collective bargaining arrangements, despite the existence of the Local No. 4-School City Agreement. It would appear that there was a conflict between the Agreement and BRL-School City contract. This conflict never became resolved, and, given the current attitude of the Gary Teachers Union, it is likely that it will never be adjudicated. Nonetheless, similar conflicts in other districts may well lead to legal or administrative actions.

THE STATE DEPARTMENT OF PUBLIC INSTRUCTION AND SCHOOL CITY CHALLENGE

The Banneker program was challenged by the Office of the Superintendent of Public Instruction (OSPI), and its legality was formally considered by the Commission on General Education (State Board of Education), which first decommissioned (decertified) Banneker and then recommissioned (certified) the school. The dispute is important not only for understanding performance contracting in Gary, but because similar challenges are likely to arise in other cities.

The challenge was not taken lightly. Considerable School City resources were devoted to preparing exhibits and attending meetings. On the other side, in addition to OSPI, the Superintendent of Public Instruction, Richard D. Wells, was personally
involved and the Governor of Indiana, Edgar Whitcome, was also drawn in and even visited Banneker.\textsuperscript{49}

The challenge divides into an informal and a formal phase. The events during the informal phase are a matter of some dispute. According to Indiana's Assistant Superintendent for Instructional Services, John S. Hand, the facts are as follows.\textsuperscript{50} In mid-June 1970, Gary officials went to OSPI with a proposal for the Banneker program and asked for its approval as an experiment. They were informed that action by the Commission on General Education and possibly other commissions would be required and the proposal should be formally submitted to Wells.

A formal submission to Wells was made late in June and the proposal was sent to the Attorney General. His office sent Wells an Unofficial Advisory Letter to the effect that the proposed BRL-School City contract would be illegal and would remove Banneker from the Common School System of Indiana. A copy of this letter was sent to Gary.

This letter did not stop the project, whereupon the State Board of Education requested a meeting with School City officials. McAndrew, Porter, Stern (of BRL) and two others, one a School City attorney, attended a meeting on August 11.

In August, according to Hand, a new Gary proposal was submitted to the Attorney General but not to OSPI. Hand requested an opinion from the Attorney General on this proposal and was told that Banneker must be part of the Common School System of the State of Indiana and it had to abide by applicable State rules and regulations. Upon receipt of this letter on September 22, 1970, Wells appointed a committee from the State Board of Education to evaluate the program and prepared a letter to McAndrew informing him of his action. The letter also transmitted a copy of the Attorney General's latest Unofficial Advisory Opinion. Wells advised McAndrew not to sign the BRL contract until State evaluation was complete.

Hand states he tried to reach McAndrew by telephone on September 22 to read him Wells' letter but failed. Hand did reach Porter and read the letter to him twice.

\textsuperscript{49} Wells was a Gary school teacher before being elected Superintendent. During the period of the dispute he was still on the School City rolls in an on-leave status. He was defeated for reelection in the fall of 1970 by John Laughlin. Wells was routinely dropped from the School City rolls on July 13, 1971, because he had accepted a non-Gary job. "Wells No Longer on School Roster," \textit{Gary Post-Tribune}, July 14, 1971. Wells was generally critical of private contracting for school services; Laughlin is on record as generally favorable to the Banneker program. ("State OK's Banneker," \textit{Gary Post-Tribune}, March 11, 1971.)

\textsuperscript{50} This account is taken from a memorandum by John S. Hand to the State Board of Education, on the subject of "Banneker Elementary School, Gary, Indiana," dated January 11, 1971 (hereinafter cited as Hand Report).
Hand states he learned on September 23 that the contract had been signed the night of September 22 and the program had been in operation since the last week in August.

The School City version of this phase is somewhat different. We were told on September 11 that the School Board had approved the program and that that action was being used as authority to commence activities. The proposed contract, we were told, had been submitted to School City's attorneys, who had rendered an opinion that the program was legal and State approval was not required.51 As a matter of courtesy, according to the School City spokesman, draft copies of the contract had been sent to the State officials but regardless of State actions or attitudes, School City planned to proceed on the basis of its own lawyers' counsel.

McAndrew publicly stated on September 22 that Wells had never told him not to go ahead with the program. His understanding, McAndrew said, was that a State committee would at Wells' request, study the "educational validity" of the program.52

School City's basic position on the program has been that although it would prefer to have the blessing of the State and was prepared to listen to State suggestions, the Banneker program did not require State approval.

The situation on September 23 stood thus: The original BRL proposal had been modified so as to make the program less subject to legal challenge.53 The program had been operating for almost a month with BRL legally in a consulting role. A formal BRL-School City contract had been signed the night before. The Attorney General of Indiana had taken the position that the program was illegal. The State Superintendent of Public Instruction had appointed a special committee that was proceeding with an investigation.

The special committee visited Banneker in September, October, November, and January. On January 11, Assistant Superintendent Hand submitted a memorandum on this investigation that became known as the Hand Report. This report, to be discussed shortly, concluded that the Banneker program involved serious violations of Indiana Rules and Regulations in six areas.

On January 19, the State Board of Education gave Gary 30 days to remedy

51 In addition to School City's regular counsel, Lewis Bose, Esq., a former attorney for the Indiana School Boards Association had been retained by Gary as special counsel in connection with the BRL contract. "Verbal Clashes Mark Signing of Banneker Contract," Gary Post-Tribune, September 23, 1969.

52 Ibid.

53 For example, the teachers and other employees remained on the School City payroll rather than being on the BRL payroll; School City retained title to, and control of, the building.
Banneker's deficiencies or face decommissioning. On February 18 the Board ruled that the deficiencies had not been removed and decommissioned the school. The practical effect was to cut off about $185,000 in State aid. However, the next distribution of money was due on April 1, so there was no immediate financial impact. Following this action efforts were made to reach an accommodation between OSPI and School City and on March 10 the school was recommissioned, with a temporary commission. Hand was charged with preparing further reports on Banneker's compliance with State Rules and Regulations, which he did.

The six areas in which School City was charged by the Hand Report (January 1971) as being deficient were: letting of the contract, use of State-adopted textbooks, time apportionment, administrative control, teacher certification, and the pupil-teacher ratio. The OSPI objection and the School City position with respect to each charge will be discussed below.

**Letting of the Contract**

The Hand Report stated that under Indiana Law the BRL contract should not have been awarded on a sole-source basis, but should have been let by competitive bid. Under Indiana law all purchases of materials, equipment, goods, and supplies over $2,000 are supposed to be procured by competitive bid. The BRL contract, because it was not limited to personal services, should have been let competitively according to the Hand Report. The Report noted McAndrew's contention that no other company was in a position to undertake such a program, but reasoned (circularly) that because bids had not been solicited it was impossible to determine if he were correct.\(^5\)

School City responded by repeating the contention that bidding was unnecessary since informal inquiries had revealed only one qualified supplier. The reply stated, however, that the experience gained with the Banneker program meant that if the need for such services occurred again a bid procedure would be used.\(^5\)

**Use of State-adopted Textbooks**

The Hand Report concluded that the State-adopted texts were not being used.

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\(^5\) Hand Report, p. 4.
Those State-adopted texts that were physically at Banneker were in storage. Indiana permits use of experimental texts other than those on the State list if permission is obtained, but such permission had not been requested.\textsuperscript{56}

School City replied that the new materials were either on the State list, or that approval for their use on an experimental basis was being sought. A request for experimental approval was submitted by Gary.\textsuperscript{57}

**Time Apportionment**

The Hand Report concluded that the Banneker curriculum did not meet the time apportionment recommended by *The Administrative Handbook for Indiana Schools*. From September through December no time had been allotted to science, and little to social science. Science studies had been scheduled to begin in January. Social science studies had begun in November but had been limited to map and globe skills. The Hand Report stated that teachers believed that BRL was primarily concerned about the two areas covered in the BRL-School City payment provisions —reading skills and mathematical computational skills. The Hand Report noted that despite the emphasis on reading skills, library records implied that students were doing less reading on their own initiative.\textsuperscript{58}

The Report considered three explanations offered by School City for the lack of time spent on science and social studies. The first was that placement of children is difficult in these areas. The second was that children who cannot read cannot handle the materials in these two areas. The third was that a systems approach to learning requires a gradual and time-phased implementation of subjects. The Hand Report dismissed these explanations with the statement that: "If this is truly an individualized program, it seems strange that it cannot provide non-reading or slower reading children with appropriate materials so that their science and social studies literacy will not be neglected."\textsuperscript{59}

The section on time apportionment concludes with the view that the Banneker

\textsuperscript{56} Hand Report, p. 4.

\textsuperscript{57} Battle letter: One wonders why approval was not requested earlier. We have no information on this point but suspect that a request for approval might have conflicted or appeared to conflict with School City's posture that State approval of the Banneker program was unnecessary.

\textsuperscript{58} Hand Report, pp. 4-5.

\textsuperscript{59} Ibid., p. 4.
program should have had several months of additional preparation “so that all curricular areas could have been served.”

School City made three replies. The *Administrative Handbook for Indiana Schools* was quoted at length on the merits of a flexible curriculum. The Banneker program, it was argued, was in accord with this philosophy. Second, Battle stated that the fall of 1970 had been spent in diagnosis and development of language and mathematics skills, in part as a preparation for other studies. He stated that the subjects called for in the manual were being taught as of the date of the letter, February 12, 1971. Third, the reply stated that the independent evaluator was testing a broad range of skills and subjects, not solely reading skills and mathematics computation.

The question of time allocation was then, and still remains, the major subject of contention between School City and OSPI. The matter is vitally important and will be discussed at greater length in other sections of this study.

**Administration**

Three basic objections about the governance of Banneker were raised in the Hand Report. First, the report concluded that Kendrick of BRL, not Benford of School City, exercised actual authority over the school. Second, there were no special services for the special education children in the school. Third, Kendrick was not licensed as a teacher or school administrator.

School City responded by stating that Benford had the status of principal and was subject to school board control. School City explained that at the beginning of the year he devoted much of his time to examining new materials and approaches to instruction, but he was, as of February, devoting “...more than normal time working with curriculum and instruction.”

With regard to special education, School City noted that Mr. Frank Wade, Supervisor of Special Education, had been working closely with Banneker, that a report from him had been received, and that the necessary special services were being provided.

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60 Ibid., p. 5.
61 Battle letter, pp. 2-4.
62 Hand Report, pp. 5-6.
63 Battle letter, p. 4.
64 Ibid. See also above discussion of special education, pp. 40-41.
Teacher Certification

Six teachers were improperly licensed or certified, the Hand Report concluded, and Kendrick and two full-time BRL consultants did not have Indiana certificates.

School City replied that of the six teachers one was a day-to-day substitute no longer with the program. Two had valid provisional or limited certificates. One other teacher held a specialized credential and had an application on file with the State of Indiana for a conversion certificate in elementary education. The other two teachers qualified for specialized certificates and had applications on file, and had also applied for conversion certificates in elementary education.

One BRL consultant had valid certificates in two other states and would apply for an Indiana license. The other would file for a limited Indiana certificate. Kendrick was not mentioned.\(^65\)

Pupil-Teacher Ratio

A special OSPI report was prepared on pupil-teacher ratios. The Hand Report concluded that the rule for a school of the Banneker category had been violated because the actual ratio, OSPI decided, was 38.2 to 1.\(^66\)

School City responded that the 23 teachers, 2 full-time consultants, and 1 principal created a pupil-teacher ratio of 29 to 1, within the limits of the State rule. Deleting the principal led to a ratio of 31 to 1. In addition, the supporting personnel and the 23 teacher aides were mentioned. Further, School City argued, the Banneker program did not have the usual classes.\(^67\)

The Decommissioning and Recommissioning

At the January 19 meeting of the State Board of Education, Hand testified that OSPI had serious reservations about the educational quality of the Banneker program. He spelled these out in a forceful memorandum dated February 12, 1971. Hand's stinging and critical style contrasts with the earlier Hand Report. The sharpness of Hand's attack is illustrated by his concluding section, which we quote in full:

\(^{65}\) Battle letter, pp. 4-5.
\(^{66}\) Hand Report, p. 6.
\(^{67}\) Battle letter, p. 5.
The information I have presented in this report clearly establishes that:

(1) The Banneker program is not a well-rounded instructional program.
(2) BRL has not succeeded in fulfilling a sizeable number of its contractual obligations.
(3) The Banneker program is not what the contract purports it to be.
(4) There is nothing uniquely innovative about the Banneker program except (a) the abdication of professional responsibility on the part of the School City of Gary and (b) the placement of the primary emphasis upon building and maintaining a systems model instead of upon the children and their needs and interests.88

The major part of the memorandum is devoted to what Hand called the “Quality of Contractual Services.” Hand first criticized the curriculum. He concluded his analysis with the statement:

By no stretch of the imagination could the materials submitted to me be considered a curriculum design. There was no indication of desired behavioral outcomes, no scope and sequence description or charts, and no indication of instructional procedures that would be followed. In addition, there were serious grammatical and usage errors in the narrative portion of the document, fragmented sentences, and sentences that made no sense.89

Hand next took up in turn the six curricular areas specified in the BRL-School City contract. Science studies, he noted, were just being commenced. The social science topics specified in the contract were not being taught. He went on to note that the contract clause relating to social studies referred to teaching respect for change of institutions by lawful means. Hand questioned the credibility of this clause because of the “flagrant disregard BRL and the School City of Gary have shown towards State rules and regulations . . .”90

The enrichment program and the literature studies were, according to Hand, limited or nonexistent. Since the last two areas—mathematics, and reading and language arts—are the subjects of BRL concentration, Hand’s comments are especially interesting and we quote them in full:

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88 Memorandum to Indiana State Board of Education from John S. Hand, February 12, 1971, p. 8.
89 Ibid., pp. 2-3.
90 Ibid.
(v) Mathematics—The mathematics program concentrates heavily on computational skills and considerably less on mathematical reasoning. The mathematics program appears somewhat unbalanced because of its nearly total reliance on programmed instructional materials and seatwork review sheets of previously presented skills; but it seems to be adequate, though unimaginative and pedestrian in its insistence that all children must tread the same path. Only the pace is individualized, and a few of the teachers appeared to be trying their best to keep that from becoming too pronounced.

(vi) Reading and language arts—Reading is the area of concentration; the other language arts, particularly handwriting, receive a token nod and occasionally some sporadic special efforts. Some work is being done in creative writing. But reading is the precious jewel of the whole program for which all other disciplines, including mathematics, must, upon occasion, step aside. At least this is how the teachers perceive the relative importance to BRL of the various curriculum areas. In the Banneker program, reading has become an end in itself to the extent that its usefulness as a functional tool for other learning seems, at times, to be ignored or forgotten. Even social science grouping is by reading level with the conceptual abilities of the students ignored, i.e., whenever the social science program actually is begun, the grouping will be by reading levels. 71

In regard to the nongraded feature of the program, Hand criticized the placement tests and the inflexibility of the placement procedure. He also disputed that the program was "student centered;" Hand regarded it as "system centered." Hand also felt that the reliance on BRL programmed reading and mathematics materials violated the contractual provisions of "individualized instructional materials." He had a number of other objections to the program that can be summarized by saying that he felt that the program did not really provide human and individualized instruction.

School City prepared materials for the State School Board replying to OSPI criticism and explaining the goals, plans, and procedures of the program. Nonetheless, the State Board decommissioned Banneker on February 18, 1971. On February 19, Hand wrote McAndrew to acknowledge the "diligent efforts" of Gary in resolving

71 Ibid., pp. 3-4.
deficiencies but stating three areas remained to be resolved if recommissioning was sought.

The first was the textbook waivers. Hand stated that, although the applications had been received, copies of the materials for State evaluation had not been received and the waivers could not be acted upon until the materials had been received and studied. Second, factual clarification was requested about the pupil-teacher ratio. The third point, and the one to which the most space was devoted, was administration and the role of Benford. The letter stated:

The specific areas for which the State Board wishes clarification and assurances are the following:

1. What is the principal’s present role and how is it related to the role of the center manager in regard to arranging and conducting teachers’ meetings?

2. What is the principal’s present role and how is it related to the role of the center manager in regard to inservice training for the staff?

3. What is the principal’s present role and how is it related to the role of the center manager in regard to evaluating staff members?

4. What is the principal’s present role and how is it related to the role of the center manager in regard to placement and transfer of students and the general administration of student activities?

5. What is the principal’s present role and how is it related to the role of the center manager in regard to the supervision of classroom instruction?

6. What is the principal’s present role and how is it related to the role of the center manager in regard to budget building for Banneker School?

7. What is the principal’s present role and how is it related to the role of the center manager in regard to building public relations with school patrons and the general public?

Certainly, the consultative nature of the contract with BRL necessitates that the principal be open and responsive to the consultations of the center manager and the BRL consultants; however, the State Board wishes to know, when there is an honest and considered difference of opinion in any of these management areas, who prevails—the principal or the center manager?

School City responded to these questions and had Benford write a letter about his duties and responsibilities. The State Board was satisfied and a temporary commission reissued.

The May 1971 Report

Hand's May 1971 memorandum on the Banneker program does not evidence OSPI enthusiasm for the program but it really alleges only one violation of State standards, and even on that point Hand hedges somewhat. The memorandum is divided into two parts: "corrections already made" and "areas needing further correction." In the former category, Hand states that reading, language arts, science, social studies, physical education and health, and fine arts are now being taught, even though, as will be noted, Hand believes some subjects should receive more time. Mathematics received one-third to twice as much time as recommended in the Administrative Handbook, but the time allocation had been reduced and was closer to the State standard in May than it was in December.

The requests for experimental waivers on books and materials were granted by OSPI in May. The teacher-pupil ratio, Hand computes, was 31.4 to 1. Certification had been resolved. The report notes that Benford, who has proper licenses, was administering the program in place of Kendrick, who was not eligible for an administrative license. This change resolved both the State's complaint about credentials and its complaint about administration. The special education program was viewed as adequate.

Two improvements in contractual arrangement are noted. First, Hand concludes that BRL was in fact operating in the "consultant" role that the contract designated to be its function. Second, Hand states that a March memorandum of understanding between the two parties specifies when refunds under the guarantee will be paid to School City.

The May Memorandum essentially makes three curricular criticisms. First, the children were not using the library enough. Second, more time should have been devoted to health, music, art, library, and social studies in Grades 1-3. Third, less time should have been spent on mathematics in Grades 1-3.

Hand follows these recommendations with a parenthetical note reproduced in full:

(Note: We would not argue that the time recommendations in The Administrative Handbook are appropriate to every situation; they are not
intended to be rigidly applied. They do, however, represent the considered
judgment of well-qualified educators as to what constitutes a balanced cur-
riculum and should not be taken lightly nor ignored.73

The memorandum also has criticisms about the contract. It states that the cost
of elementary education in Gary is not $800 but $675 per pupil, and the BRL
compensation base is different from the pupil-cost base. It also criticizes the provi-
sion of facilities to BRL without rent but notes that BRL has indicated a willingness
to negotiate this point. Finally, it concludes that individualized instruction, as of
May 1971, had not been provided.

In sum, the major remaining serious source of contention between School City
and the State is the time allotted to various subjects. Even here, the question seems
not to be one of legality but of "sound practice."

Comments

Of the six State complaints, three were basically matters of form and three were
matters of substance. In the first category were the complaints about the letting of
the contract, teacher certificates, and use of State-adopted texts. Practically all
statutes that require competitive bidding provide for certain exceptions and the
BRL-School City contract could likely have fitted under some sole-source contract
justification. In the absence of this, a formal bid procedure could have been used.
Temporary certificates could have been obtained for those without proper licenses.
It is to be noted that all except the BRL personnel had been at Banneker previously,
and that the BRL consultants were professional educators. Kendrick falls in a
different category but his status is properly considered under the administration
rubric. Finally, the materials being used were well known in educational circles and
widely used. They qualified under the experimental-waiver provisions of Indiana
law. If the program had been a permanent part of the Gary school program, some
difficulties might have arisen; but as long as the program met the requirements for
experimental status, the textbook-approval problem was more one of paperwork
than a substantive matter.

The other three complaints, administration, pupil-teacher ratios, and time ap-
portionment, are much more serious. The first problem was relatively easily re-
solved. There was substantial merit to OSPI's charge that Kendrick, unlicensed and

73 Hand, May memorandum, p. 4.
not an employee of School City, was in charge at Banneker from August to December 1970. Partly because of State pressures, partly because of other factors, this situation was changed in December 1970 and School City legally and practically was in direct charge. Benford and Kendrick were reassigned by their respective employers for the 1970-71 school year, and the new BRL supervisor qualifies for teaching and administrative credentials, so the issue is now moot.

The pupil-teacher issue also became moot as the program evolved and more certified employees were assigned to Banneker. However, the State's insistence on the maintenance of traditional class sizes raises an important conceptual or policies issue. Does this mean that school districts will not be able to experiment with the use of aides and other types of resources if it increases the pupil/certified-teacher ratio? On a less philosophical level, programs that increase pupil-teacher ratios may well run into the same state opposition that Gary encountered.

The final and most difficult issue was the State's insistence that more time be allotted to science and social studies. Factualy, the State was correct. The autumn had been spent at Banneker on reading and mathematics skills. Whether every school should be forced to follow State time guidelines on a month-by-month basis is a different question. Certainly, there is strong support among the Banneker parents for stress on reading and mathematics even if it does mean less time for other subjects. Nonetheless, Gary is still subject to the State's objection that it is not complying with the rules.

OSPI raised some pertinent questions about how the actual BRL program at Banneker accorded with the publicly announced goals and intentions. Even though some OSPI criticisms appear to be well taken, it is hard to see how they made the program illegal.
V. IMPACTS ON THE BANNEKER COMMUNITY

INTRODUCTION

This section turns from the educational process at Banneker and how it was changed by the BRL program, and focuses attention on the educational-product outcomes. The prime topic is cognitive and noncognitive effects on students. In addition, it also considers how the program affected some of the other groups involved in the daily life at Banneker—parents, faculty, and aides.

STUDENT ACHIEVEMENTS

Cognitive Objectives

The cognitive objectives of the program are straightforward. As the BRL-School City contract spells them out:

BRL makes the following guarantee with regard to any student enrolled in the Center with an attendance of no less than 150 days during each applicable school year:

(i) that each student enrolled in the program for three (3) full consecu-
tive years will perform at least at grade level at the end of the third year, as measured by nationally recognized tests;

(iii) that each student enrolled in the program for less than three years will each year achieve at least a year’s advancement in reading and mathematics as measured by nationally recognized tests or in the case of any student who cannot read at the beginning of the school year, that he will score at least in the 50th percentile on a nationally recognized reading readiness test. If a student does not achieve the results guaranteed BRL will refund the entire fee paid for each student that is attributable to the instructional phase of the program for the applicable guarantee period.

For the purpose of this agreement, cost attributable to the instructional phase of the program refers to all expenditures with the exception of clerical and custodial costs.

BRL’s commitment is eased by the requirement that a student must attend 150 days during a year. Also, for the guarantee to apply fully the student must attend all three years. If a student attends for one or two years, however, BRL is obligated to increase his achievement one year per year, which still represents a substantial commitment.

Despite a favorable socioeconomic setting and fine equipment and teachers, Banneker has done poorly on reading and mathematics achievement tests. Some representative test scores are shown in Table 5. In general, Banneker has been below the Gary average but has not been greatly different in the lower grades. By the sixth grade, however, a sizable gap has opened between the Banneker mean and the national norm.

Effects of Transfers

One important question about the Banneker program is whether the open-transfer program significantly changed the student population. As mentioned earlier, some community leaders and other parents with high aspirations for their children transferred their children into the program. It would be expected that they would have higher achievement levels than the average Banneker pupil. A less remarked phenomenon, however, is that a number of parents with children who were doing poorly in the regular Gary schools transferred their children into Banneker in the hope that the new program would produce a radical improvement.
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SOURCE: School City of Gary.
These children would tend to move the expected school-achievement mean downward.

The impact of the transfers is so major an issue that we performed a statistical analysis. We took the Banneker roll and identified those who had transferred into the program. We then compared the initial achievement test scores of the transferees and regular Banneker students. The results are shown in Table 6.

There are no substantial differences in magnitude between the mean scores of the transfers-in and those who had been at Banneker previously, except for sixth-grade math, where the regular Banneker students scored higher than the transfers-in. Statistical "t" tests were run on the differences between the means to see if they were significant. The only "t" test that yielded a reasonably low probability of error was that for the sixth-grade math scores. Two others were significant at the 10-percent level; on the whole, in the first grade, regular Banneker students scored higher in reading; in the fifth grade, the transfers-in scored higher in reading. The data imply that the open transfer policy did not greatly affect the mean scores.

It stands to reason, however, that if a large number of children doing poorly in conventional programs and children who are not sufficiently challenged by conventional programs transfer into the school, the range may be larger even if the mean is not affected, and certainly there will be more students at the extremes. Thus, even if the transfer policy did not affect the mean, it is almost certain to have resulted in a wider variance of potential-achievement.

**Midyear Test Results**

CURE tested a 20-percent sample of students three months after the program started. The statistical validity and reliability of any test given after such a short interval is highly dubious. Particularly serious is the necessity of assuming a straight-line interpolation between grade levels. The results, however, have been widely reported and we therefore reproduce the main features here, in Table 7.

Two points stand out. First, the mean achievement gains were encouraging if one assumes that the same pattern will persist for three years. Second, there was a wide variation among means for different subjects and grades. Also, despite improvement in the means, a number of individual students did not improve and some even regressed.
Table 6

INITIAL ACHIEVEMENT SCORES: TRANSFERS-IN AND PREVIOUS BANNEKER STUDENTS

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<tr>
<th>Grade</th>
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Reading Test Means

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Mathematics Test Means

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a Includes students who moved into Banneker or into Gary.
b Significant at .10 level.
c Some data are missing and number of test results too few for significant test.
d Not significant at .20 level or smaller.
e Significant at .20 level.
f Significant at .02 level.
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<th>Number With No Gain or Loss</th>
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<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>19</td>
<td>13&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6</td>
<td>0</td>
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</tr>
<tr>
<td>2</td>
<td>16</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>.07</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>12</td>
<td>3</td>
<td>2</td>
<td>.27</td>
</tr>
<tr>
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<td>6</td>
<td>16</td>
<td>15</td>
<td>0</td>
<td>1</td>
<td>.93</td>
</tr>
</tbody>
</table>

| Mathematics |
| 2     | 12            | 10                  | 1                          | 1                 | .72          |
| 3     | 14            | 8                   | 1                          | 5                 | .15          |
| 4     | 22            | 19                  | 2                          | 1                 | .49          |
| 5     | 16            | 12                  | 2                          | 3                 | .47          |
| 6     | 16            | 13                  | 0                          | 3                 | .55          |


<sup>a</sup>The test for Grade One indicates reading readiness and does not give a grade equivalent; 12 students improved one letter grade and one improved 2 letter grades.
Spring 1971 Test Results

The results of the tests administered in the spring of 1971 were generally favorable, although they left unanswered the question of whether BRL would bring all the students up to norm level in three years. The mean differences between the Metropolitan Achievement Test administered in the fall of 1970 and the spring of 1971 were, for 91 students in the first grade, 1.7 achievement years in reading and 1.7 in mathematics. For 546 students in the second to sixth grades, the average gains were 0.72 achievement years in reading and 1.18 in mathematics.74

Price Waterhouse interpreted the contract phrase, "at least a year's advancement," also to mean a month's advance for a month's instruction. On this basis 35 students met the goal in reading only, 172 students met the goal in mathematics only, and 189 met the goal in both subjects. Put differently, 41.0 percent of the students made a year's gain in reading and about 66.1 percent made a year's gain in mathematics.75

The achievement gain was not uniform among grades. Table 8 shows the pre- and post-test scores. Roughly eight months intervened between tests, so that on the formula that a month-for-month gain represents a "year's achievement," only the fourth grade made a year's achievement in reading. In mathematics, however, all but one of the grades made over a year's gain and the one exception made almost a year's gain.

These figures show the rate of gain. The BRL contract defines the goal in terms of achievement level. BRL will be paid according to the number of students who are at or above grade-level norms in both reading and mathematics. According to School City, 75 percent of the Banneker students in prior years were below this mark.76 The published figures do not specify the number of students who were at or above grade-level norms as of June 1971, but they indicate that, so far, the fraction of Banneker students who are at or above national norms has advanced from one-fourth to one-third. This estimate would also suggest that unless the rate of gain increases somewhat, BRL will have to make a substantial refund to School City.

75 The press made wide use of a figure of 72.5 percent. This figure was obtained by adding all students that had made a year's gain in both subjects (34.6 percent), those that made a year's gain in reading only (6.4 percent), and those that made a year's gain in mathematics only (31.5 percent). Put differently, the 72.5 percent figure quoted as the measure of success in newspaper accounts represents all students that made a year's gain in either reading or mathematics or both. The contract, however, requires a year's gain in both subjects for BRL payment.
76 "School City of Gary Reports Success at Banneker School," p. 2.
Table 8

ACHIEVEMENT SCORES BY GRADE, FALL 1970 AND SPRING 1971
(In grade-level equivalents)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Reading</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Spring</td>
<td>Difference</td>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td>2</td>
<td>1.9</td>
<td>2.6</td>
<td>0.7</td>
<td>1.7</td>
<td>2.8</td>
</tr>
<tr>
<td>3</td>
<td>2.5</td>
<td>2.9</td>
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<td>3.2</td>
</tr>
<tr>
<td>4</td>
<td>3.2</td>
<td>4.1</td>
<td>0.9</td>
<td>3.4</td>
<td>4.7</td>
</tr>
<tr>
<td>5</td>
<td>3.8</td>
<td>4.5</td>
<td>0.7</td>
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<tr>
<td>6</td>
<td>4.6</td>
<td>5.2</td>
<td>0.6</td>
<td>4.8</td>
<td>6.0</td>
</tr>
</tbody>
</table>


Only the achievement of the sixth-grade students affects 1971 payments. Of 149 students, 12 transferred out, 3 did not attend 150 days, and 3 were not covered by the guarantee for other reasons. Of the remaining 131, only 43 (33 percent) met the guarantee of a year's achievement in both subjects.

In sum, the BRL cognitive achievement gains compared favorably with those of most remedial programs and of other performance contracting programs that we know about. At the end of the first year, however, only about a third of the students had achieved the program's goal.

OTHER STUDENT IMPACTS

The concept of a "student-centered" curriculum, which figures prominently in BRL discussions of its approach, implies that the Banneker program should have student-effects not only in the cognitive domain but in affective and other domains.
Assessing these impacts is difficult, however, because quantitative measures are not easily obtained. CURE, the evaluator, approached this problem by means of short student questionnaires designed to probe the student's self-image. Some questions about plans for college and work were asked, for example. The results of this survey will probably be available when the evaluator's report is released.

We took a different approach. First, we searched for objective measures of behavior that might provide a basis for quantitative inferences about affective impacts. Second, in a series of informal interviews with students and parents we tried to elicit feelings and reactions.

**Attendance**

Attendance is a possible quantitative measure of student attitudes at the primary level. Unhappy children seem more likely to stay home than happy children. Attendance has heightened significance in the Gary context. Recall that the BRL guarantee does not apply to pupils who attend less than 150 days in a year. One of the concerns of some observers is that the BRL personnel might not be diligent in following up on absent students who are also likely to be poor students. BRL makes less use of social-worker time than does the conventional Gary school.

Table 9 presents attendance percentages. Banneker attendance for the first two quarters was as high as, or higher than, attendance at Banneker the previous year and the average for all Gary schools. During the third quarter it fell below both previous Banneker and average Gary attendance, and dropped off even more during the final quarter. It was considerably lower than Banneker attendance the previous year, or the Gary average for 1969-70.

The drop in attendance during the third and fourth quarters confirms a report we had received to the effect that class cutting had increased. BRL personnel regarded this as one of the negative side-effects of the greater freedom at Banneker during 1970-71. As they see it, the children were unused to the somewhat greater degree of personal responsibility at Banneker.

Gross attendance figures might obscure some patterns of chronic absences by a few students. A more detailed study has been conducted at Banneker, and the data, when released, should provide considerably better evidence on the possible impact of the Banneker program on attendance. At this point in time the best conclusion would appear to be that the program is having a negative impact on children's attitudes towards school, judging by attendance data. The BRL explanation is plausi-
Table 9
BANNEKER ATTENDANCE, 1969-70 AND 1970-71
(In percentage of enrollment)

<table>
<thead>
<tr>
<th>Period</th>
<th>Date</th>
<th>Grade</th>
<th>Banneker 1969-70</th>
<th>Banneker 1970-71</th>
<th>All Gary Schools 1969-70</th>
<th>All Gary Schools 1970-71</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>9/3/69-10/31/69</td>
<td>K</td>
<td>95.1</td>
<td>95.0</td>
<td>92.4</td>
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</tr>
<tr>
<td></td>
<td>and 9/1/70-10/30/70</td>
<td>1-3</td>
<td>96.4</td>
<td>97.9</td>
<td>96.4</td>
<td>95.9</td>
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<td></td>
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<td>4-6</td>
<td>97.7</td>
<td></td>
<td>96.9</td>
<td>96.2</td>
</tr>
<tr>
<td>II</td>
<td>11/3/69-2/13/70</td>
<td>K</td>
<td>91.1</td>
<td>92.2</td>
<td>90.2</td>
<td>89.0</td>
</tr>
<tr>
<td></td>
<td>and 11/2/70-2/28/71</td>
<td>1-3</td>
<td>94.9</td>
<td>95.5</td>
<td>94.4</td>
<td>93.3</td>
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<td></td>
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<td>95.2</td>
<td></td>
<td>95.5</td>
<td>94.8</td>
</tr>
<tr>
<td>III</td>
<td>2/16/70-4/17/70</td>
<td>K</td>
<td>94.2</td>
<td>88.2</td>
<td>91.9</td>
<td>89.1</td>
</tr>
<tr>
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<td>and 2/1/71-4/8/71</td>
<td>1-3</td>
<td>93.6</td>
<td>91.0</td>
<td>94.5</td>
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<td>95.4</td>
<td></td>
<td>95.5</td>
<td>94.1</td>
</tr>
<tr>
<td>IV</td>
<td>4/20/70-6/19/70</td>
<td>K</td>
<td>94.5</td>
<td>88.9</td>
<td>92.9</td>
<td>92.6</td>
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<tr>
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<td>and 4/19/71-6/15/71</td>
<td>1-3</td>
<td>97.1</td>
<td>90.0</td>
<td>95.7</td>
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<td></td>
<td></td>
<td>4-6</td>
<td>95.9</td>
<td></td>
<td>96.1</td>
<td>95.1</td>
</tr>
</tbody>
</table>

SOURCE: School City of Gary records.

ble. The available evidence, however, does not permit one to either accept or reject this theory.

Pupil Membership 77

The transfer arrangements for the Banneker program make pupil membership a possible index of affective impacts. Parents, particularly those who had transferred their children into the program, would be likely to transfer children to other schools

77 Pupil membership is enrollment minus all withdrawals, minus transfers-out, plus enters, plus reenters, plus transfers-in.

77
if they were having problems. Pupil membership at Banneker did decline somewhat, but when we examine the 1969-70 data and the all-Gary data shown in Table 10, it does not appear that the decline was in any respect abnormal. In fact, it was about half that of the previous year at Banneker. There is no evidence of people "voting with their feet" in 1970-71.

On the other hand, as of the fall of 1971-72, enrollment declined at the school from 798 in 1970-71 to 707. According to Mr. Sherman Newell, the principal, only 15 or 16 students from outside the Banneker attendance area (out of a desired 100) have been admitted to the program. He also noted that the decline in enrollment

<table>
<thead>
<tr>
<th>Period</th>
<th>1969-70</th>
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<tbody>
<tr>
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<td>Banneker</td>
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<tr>
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<tr>
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<td>IV</td>
<td>87</td>
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<table>
<thead>
<tr>
<th>All Gary Schools</th>
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<th>1970-71</th>
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<tr>
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</tr>
<tr>
<td>IV</td>
<td>3458</td>
<td>22,265</td>
</tr>
</tbody>
</table>

SOURCE: School City of Gary records.

*Includes Opportunity, Special, and ungraded classes.*

78
has been among students from the Banneker attendance area. This drop would suggest that the program may not be as popular with students or their parents as was originally thought, and that judgment should be withheld until the evaluation at the end of the 1971-72 school year.

Attitudes of Students and Teachers

The statistical data are not very informative about effects on student attitudes. Moreover, the data could be hiding some qualitative impacts. To explore these issues we interviewed a variety of students and parents. We tried to contact the interviewees in relatively normal circumstances, e.g., in school hallways or at home, and to keep the interviews unstructured. We hoped that an informal, conversational format would elicit more candid responses than would a formal survey.

Students were interviewed as the opportunity for a natural, relaxed conversation presented itself in classrooms, halls, and the school yard. Parent names were selected from our copy of the school's roster, which listed not only present students but transfers-out. The roster also indicated which students had transferred-in to the program. We selected names in no particular order except that we gave special attention to parents who had transferred children into or out of the program. Since such parents had taken a positive action with respect to Banneker we thought that they should be particularly well-informed about the school and likely to have well-developed opinions. We also wanted to be sure that we heard some negative comments to balance the views of those responsible for the program and we thought we would be most likely to get these from parents of transferees.

The reactions we obtained ranged from extreme criticism to wild enthusiasm. Most of the respondents favored the program over the conventional Gary schools.

Taking both the critical and the supportive comments together, a single picture emerged. The students generally liked what they called "programming," i.e., the Sullivan materials for reading and mathematics. Students who had been having difficulty in school, and particularly their parents, were enthusiastic. A number of parents reported that their children liked the Banneker materials so much that they developed a happier attitude toward school.

78 "Two Teachers Refuse to Transfer," Gary Post-Tribune, October 19, 1971.
79 Considering the method of selection and format of the interviews, we make no statistical generalizations nor extrapolations to the total population of Banneker students and parents. Nonetheless, there was such a consensus about the program that we feel a reliable picture emerged from the interviews.
Some students, and the parents of some students whom their parents regarded as gifted, reported boredom. The major criticism we heard was a lack of challenge for students who were highly proficient in the skill areas. We checked this matter with teachers and supervisors. Their remarks confirmed the pattern. At the start of the year there were not enough enrichment and other materials for students who had topped-out on the Sullivan materials. However, as the year went on, special groups for these students and special materials were made available. Thus, there is some question whether the criticism was valid as of the spring of 1971. Nonetheless, at least for the fall of 1970 and winter of 1971, the pattern that emerged from the interviews was that children who had skill-deficiencies were "turned on" by the program while the very able students lacked challenge.

Another theme that emerged, though not as strongly, was that the Banneker teachers "cared." A very high regard was expressed for the spirit, competence, and attitude of the faculty.

A third theme was that Banneker was not strict enough. There was some difference of opinion as to whether Banneker discipline was less strict than at other Gary schools or at Banneker itself in 1969-70. In any event, there was a strong consensus that tight discipline is absolutely essential.

To support these generalizations, we summarize a few interviews.

_Mother of Two Pupils Who Transferred Into Program._ The children were enrolled in the program because one child, A, was not doing well at the former school. She sees improvement but is still dissatisfied with A's progress. She feels that he is too inclined to play rather than work and that the Banneker teachers are not strict enough. Nonetheless, she likes the teachers and had high praise for one teacher whom she specified by name.

She stated that her children like the program "better than anything" and that they talked extensively about it at home. As a result of this talk she felt well informed about the program. She stated that her children are more interested in school than they used to be.

She generally feels that the children are doing well at Banneker even though she feels A could do better. She does not expect to transfer them to another school.

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This criticism also arose in our interviews with the custodial and food service staff. One woman explained to us that, "Discipline shows you love children because you care for them and you care what they do." BRL's attempt to engender more self-discipline in the students was interpreted by the custodial staff as reflecting a lack of concern.

It should be emphasized that compared with many other schools we have visited, we found Banneker exceptionally orderly and the students exceptionally well behaved.
At the end of the interview she volunteered an assessment of the program. She stated that this is a good program because it will turn out better students. She thinks that the Banneker graduates will do better in high school because they are learning to work on their own. She likes the report card and the use of pluses and minuses instead of conventional grades. She feels this reduces the focus of the children on grades and gives them a new and better outlook on learning.

*Mother of a Pupil Who Transferred Into the Program.* One parent turned out to be a Gary teacher who had transferred her child, B, into the program and had decided that he would not enroll there next year. Her views seemed so significant that we arranged to have a second and longer interview and to tape her remarks. It should be emphasized that her views are untypical of those of most of the other parents we talked to, but we think they are particularly worthy of note both because of her dissatisfaction with her child's progress and because of her professional background.

She stated that her child is unusually creative and found the conventional classroom at his former school boring, so she had put him in the Banneker program. She had expected an individualized curriculum, which she hoped would permit B to grow at his own speed. She concluded that this opportunity was not available, and so she intended to withdraw him at the end of the year.

Her assessment of the mathematics component was that it stressed operations that were featured on standardized tests, such as addition and subtraction of whole numbers, and slighted multiplication, division, and mathematical concepts. She also had objections in the reading area. She felt B's regular teacher was harsh and stern. She also felt that the paraprofessional was not well trained and had mismarked some of B's papers. One example she cited was of a paper in which B was to circle all nouns. B had done so, but the learning director had handed it back to him and told him to redo it.

Another objection was that B would finish a workbook and be told to read one of the supplementary books, but would thereupon find he had read all of them. She felt that there was an attempt to keep groups together rather than let each student go at an individual pace. She stated that B had become less interested in reading outside the classroom.

She stated that B disliked school and had developed a psychosomatic ailment as a result. She had taken B to doctors, but it turned out that his dislike of school was the real problem.

Rather surprisingly, this mother was not in favor of discontinuing the program. Despite her unhappiness about B, she believes that the program should be continued.
because there is "merit in the philosophy and objectives," but she does not think the objectives are being met. She believes that if the paraprofessionals were well trained, a fully individualized instruction could be instituted. She feels that any new program will have problems the first year and that with a good evaluation many of the Banneker problems can be overcome. She would like to see the program continued.

*Mother of Three Children Who Were at Banneker During 1969-70.* In a conventional program, the three children, C, D, and E, would be in grades 2, 3, and 4. She contrasted the Banneker program in 1969-70 and 1970-71 as follows. During 1970-71 the children could work at their own speed and there was more material. She preferred the BRL program.

She expressed reservations about the accuracy of the placement tests. The youngest child, E, had been placed at the second-grade level, which the mother thought was too low. E had reacted by being unhappy and bored. At midyear the students had been retested and regrouped and E was considerably advanced and was much happier. Two of the children, C and E, were in the same groups for some studies. She feels that the three children are now placed correctly with respect to their abilities. One child is reading considerably above his nominal grade level.

She feels that the stress on reading is good, but she would like to see more background reading. She stated that the children loved the school. "That's all they talk about at home."

She feels that discipline at Banneker is less strict this year. She would like to see a firmer regime.

We asked her opinion about the reports that the program was dull for the brighter students. She agreed this was an appropriate criticism at one point in the program, but as of the time of the interview (spring 1971) she felt "the bugs have been ironed out," and that the program was also good for the more able students.

We asked if she had considered removing her children. She stated that all her dissatisfactions had been alleviated and she would leave her children in the program.

*Mother of Two Children Who Transferred into Banneker.* The children, F and G, had done very poorly in their previous school and each had repeated one grade. The mother was ecstatic about the Banneker program. She stated that, "Any time you see growth in youngsters, it is great!" She felt the new curriculum was the key. The BRL people and teachers were highly praised. In short, she could not say enough in praise of the program.

Little purpose would be served by summarizing many interviews. It should be
emphasized that the summaries above are intended merely to give a flavor of the range of opinion. Actually, two-thirds or more of the people we interviewed were favorable to the program. Even those who criticized it usually supported its continuation; generally, they merely wanted to see some changes. The program has a very high degree of support from the parents.

More important for the present topic—the effects of the program on the children—most of the respondents opined that their children liked school, and a number stated that the Banneker program had improved their children’s general attitude toward learning. There were some exceptions, such as the pupil B discussed above, but on the whole the parents to whom we talked generally felt the program had had beneficial affective impacts. This view was consistent with our conversations with the students themselves.

**IMPACTS ON TEACHERS**

**Banneker Teachers**

It is very difficult to assess the impact of the program on the Banneker faculty. The Banneker program has been constantly in the public spotlight. Banneker teachers have been interviewed incessantly by magazines, newspapers, TV, government officials, union executives, education students, evaluators, researchers, and others, to the point that publicity has become an unfunny joke among them. There is a rather serious question about how much of a public face any teacher assumes when he is interviewed now.

Considering this situation, we were gratified to be able to obtain some instructive information from Banneker teachers. We deliberately chose to interview late in the year, when teacher's opinions would reflect the history of most of the program during 1970-71. The interviews took place around the time that the teachers could apply for transfer. Thus, the teachers were presumably addressing some of our questions on their own. It is noteworthy that only two Banneker teachers announced an intention to transfer, and even those two changed their minds later and decided to stay. Considering the pressures during 1970-71, these actions represent a significant vote of confidence in the program.81

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81 There will be some turnover in the faculty. A few members were teaching on temporary licenses. Under Gary rules these teachers will have to be replaced.
As with most programs, teacher reactions run from highly favorable to quite critical. For example, one teacher was obviously enthusiastic about her work. She stated that in one of her groups she had a boy who was four readers ahead of the rest of the group and it was wonderful not to have to leave him behind. The children, she said, did not like “reading,” but if told that they would not be allowed to “program” they regarded it as a punishment. She told us that it was professionally much more satisfying to be in such a program. She stated, as did all the other teachers, that the present program was much harder than “the old way.” She said she was on her feet more of the time. More important, a new and more difficult method of planning classes was required. Nonetheless, she clearly preferred the BRL approach.

In contrast, another teacher clearly had misgivings about the program because she believed it was inimical to public schools and did not give enough credit “to what teachers have been doing for thousands of years.” Still another teacher preferred the former curriculum because it was less structured and she could be more creative.

Even though some of the teachers have reservations they have worked very hard to make the program effective and, as noted, are prepared to return next year rather than exercise their change option. There has been and is a loyalty to the school and a willingness to make the program work even at the cost of a great deal of personal effort. Indeed, the one point that was made by all teachers was that the program placed greater demands on them than did the conventional program. One curriculum manager—a highly regarded teacher—remarked that if she had known at the start of the year what she knew at the end of the year, she doubted she would have gotten into the program. She hastened to add that at the end of the first year she could truly say she was glad to have had the experience.

Four generalizations about the results of the program for the Banneker teachers seem justified. First, the first year imposed great strains on them, due both to increased professional requirements and to the glare of publicity. Second, teacher morale had been low at one point but had recovered to a considerable extent. We heard candid admissions from a number of diverse sources that teacher morale had dipped dangerously low around the middle of the year. However, by spring 1971 the teachers seemed in reasonable spirits and no transfers had been requested. Third, by the end of the year, teachers were exercising a strong voice and considerable authority over the program through the Curriculum Managers Committee. Fourth, despite reservations on the part of some, most teachers felt the year to have been valuable professionally.
Other Gary Teachers

As previously discussed, one of the results of this year's operation was to neutralize union opposition. The Gary Teachers Union still strongly criticizes some educational aspects of the program and it still questions the integrity of BRL. Nonetheless, its attack is less vigorous for two reasons. First, the increased number of teachers at Banneker brings the program more in line with union standards. Second, Local No. 4 feels that changes have made the program less objectionable educationally. The union is still not about to endorse the program, but it is not regarded as the pressing problem it once was.

The involvement in the program of individual teachers outside Banneker appears to be slight. The contract contains references to training sessions and exposure of other Gary teachers to the program. This may still occur but apparently this year has seen relatively little formal involvement of Gary teachers outside Banneker. There have been various open-houses and demonstrations at Banneker, but these have occurred for the most part during school hours when other teachers have classroom duties. Some teachers undoubtedly made time to attend, but until such time as the Gary schools provide substitutes to release teachers for demonstrations and workshops it seems unlikely that there will be much formal involvement of non-Banneker teachers in the program. The demonstration or catalyst effect appears small to date.

We interviewed two teachers in other Gary schools who were familiar with the program because they have children at Banneker. Both teachers appear quite knowledgeable about teacher affairs in Gary.

One stated that teachers were quite excited about Banneker at the start of the project. Many transferred their own children into the program. Others worried about whether the program was a threat to them and to established school practices. Now, according to this teacher, the "undertones," as she put it, are that the program has not been successful. There is some disappointment but more acceptance of the program because it no longer is regarded as a threat.

The teacher also stated that the initial transfers from Banneker engendered a good deal of hard feeling throughout the system. Many of the teachers transferred had widespread friendships throughout the system and involuntary transfers are not lightly regarded in Gary. By the spring, according to this source, the situation was more one of acceptance than objection.

Unlike most of the Banneker parents, this teacher-parent was unhappy with the concentration on reading and mathematics. She believed that BRL was concen-
trating on the testable subjects and that the children were losing out in the nonskill areas.

This same theme was echoed by another teacher. She felt that gifted children were not being sufficiently challenged and that the program was too "permissive," i.e., discipline was not sufficiently strict.

We asked her what the teachers thought of the Banneker program. She stated that the Banneker teachers do not discuss the program even with their friends. She said that she had friends on the Banneker faculty and they were very guarded in their comments.

She felt that the students at Banneker should do well on the standardized achievement tests. After all, she said, they take a test every day; the materials are simply tests.

These two teachers do not represent an objective sample of district opinion, but since they are long-time employees with many friends among the Gary teachers, we suspect that their views may be widely shared.

In sum, at the start, the Banneker program engendered apprehension, some unhappiness, and some very high expectations among the Gary teachers. By spring the attitude seems to have become more casual. There is no evidence yet of the program having broad district-wide change-agent properties with respect to teaching practices.

**IMPACTS ON PARAPROFESSIONALS**

Paraprofessionals are used generally in Gary's Title I schools, but not on the scale that they are used at Banneker. The increased utilization at Banneker plus some unhappiness with their conditions at Banneker seems to have triggered a move to unionize teacher-aides.

In the fall, the 20 learning directors for Banneker were hired at $1.75 to $2.05 per hour for 6-hour days. There appear to have been the usual frictions encountered when a teacher and an aide share a room. Also, the aides apparently shared in the general decline in morale through the fall and winter. During December, matters came to a head and both Local No. 4 and the School City administration entered the picture. The union began talking about forming a bargaining unit. The school administration authorized a pay raise—the scale went up to $2.15 to $2.75 per hour—and made some other changes.
Some School City officials have questioned how adequately and aggressively the Gary Teachers Union would press for benefits for the paraprofessionals, since the union had in the past been antagonistic to increased hiring of and responsibilities for aides. The union has replied that this is an internal union matter and no concern of management. Local No. 4 states that it has sufficient paraprofessional membership to be the bargaining agent for this group, and has requested recognition. A paraprofessional spokesman has denied this. Apparently, recognition will not be granted by the school board.\textsuperscript{2}

It would be inappropriate to attribute the pressure for paraprofessional unionization solely to the performance contract, but it undoubtedly was a factor at least in the timing of the recognition request. Even if the union had not moved to organize the paraprofessionals it seems likely that their extensive use at Banneker would have resulted in some new School City policies with respect to this class of employee.

\textbf{SUMMARY}

Cognitive achievement gains were respectable: 1.7 achievement years for the first grade in reading and mathematics, and 0.7 and 1.2 for reading and mathematics, respectively, in the other grades. We should keep in mind, however, that this is a three-year program (with an additional transition year). Cognitive results at the end of three years, not the end of one year, are the important consideration, and there is no way to predict how many students will be at norm level at the end of the program.

Noncognitive impacts on students seem to be favorable on the whole. A good many knowledgeable parents and teachers, it is true, believe the program did not offer sufficient challenge to exceptionally able students, but this situation seems to have improved toward the end of the year. How effective the program is for those at the upper end of the achievement spectrum remains an open question, however.

All present faculty have elected to stay at Banneker next year. Morale hit a low at the middle of the program but has greatly improved. There is a consensus that the Banneker type of program imposes much greater professional demands upon a teacher than does the conventional curriculum. The burden on the Banneker teachers was heightened by the glare of publicity in which they worked during 1970-71.

\textsuperscript{2} "Teachers Union Bid Spurned," \textit{Gary Post Tribune}, August 11, 1971.
Non-Banneker teachers seem to have been only minimally influenced by the program. The initial unhappiness about teacher transfers, and the concern about the program, have been replaced by a more live-and-let-live attitude.

Paraprofessionals have received pay increases and Local No. 4 seeks recognition as their bargaining agent. This new role is at least in part a result of the much greater use of paraprofessionals at Banneker than in conventional programs.
VI. CONCLUSIONS ABOUT THE BANNEKER PROGRAM

THE EDUCATIONAL PROCESS

The Banneker program during 1970-71 was, from a pedagogical point of view, more conventional than had been originally intended. The basic features of the program are summarized in Table 11. The goal of fully individualized instruction in all subjects was only partially realized. The reading and mathematics areas were farthest along because extensive use was made of the Sullivan programmed materials. The early part of the year saw a great concentration on reading and mathematics. Even at the end of the year, the State of Indiana OSPI felt that more instructional time should have been devoted to subjects other than reading and mathematics. The instructional techniques and materials for the subjects other than reading and mathematics were relatively conventional, but BRL has a big push under way to develop new materials and techniques for the second and third years of the program.

Even though the individualized instructional goal was only partially achieved during the first year, the Banneker program was much more flexible than the conventional Gary program.教育ally, the approach utilizes differential staffing, ungraded small-group instruction organized around mastery of specified materials, and scheduling on the basis of 20-minute modules. The program uses fewer teachers and more paraprofessionals than does the conventional program. It
Table 11
BANNEKER PROGRAM AND RESOURCE INFORMATION

<table>
<thead>
<tr>
<th>Characteristics of students</th>
<th>Grades K-6; black, lower-middle-class family; low transiency rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program scope</td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td>All subjects</td>
</tr>
<tr>
<td>Number of students</td>
<td>850</td>
</tr>
<tr>
<td>Class time</td>
<td>Entire school day</td>
</tr>
<tr>
<td>Class size</td>
<td>Variable</td>
</tr>
<tr>
<td>Number of sections</td>
<td>20</td>
</tr>
<tr>
<td>Facilities</td>
<td></td>
</tr>
<tr>
<td>Space</td>
<td>Entire school</td>
</tr>
<tr>
<td>Students/classroom/day</td>
<td>Variable</td>
</tr>
<tr>
<td>Furnishings</td>
<td>Conventional</td>
</tr>
<tr>
<td>Staffing</td>
<td></td>
</tr>
<tr>
<td>Certified teachers</td>
<td>5 curriculum managers (master teachers); 20.5 assistant curriculum managers (other teachers)</td>
</tr>
<tr>
<td>Special teachers</td>
<td>2 curriculum consultants</td>
</tr>
<tr>
<td>Aides</td>
<td>20</td>
</tr>
<tr>
<td>Other</td>
<td>1 program director</td>
</tr>
<tr>
<td>Equipment</td>
<td>No special equipment; 1 reading lab, operated mornings</td>
</tr>
<tr>
<td>Materials</td>
<td>BRL-Sullivan Project Read, Project Math; Science: A Process Approach (AAAS-Xerox); Map: A Course of Study; other standard Indiana texts</td>
</tr>
<tr>
<td>Pre-service training</td>
<td>2 weeks</td>
</tr>
<tr>
<td>In-service training</td>
<td>4 weeks plus continuing activities of 2 full-time consultants</td>
</tr>
<tr>
<td>Other support</td>
<td>None</td>
</tr>
<tr>
<td>Incentives</td>
<td>None</td>
</tr>
</tbody>
</table>
puts unusual stress on materials and curriculum consultants. Children move from group to group within a single subject area more frequently than in the conventional program. Moreover, the 20-minute time module, plus the abandonment of the self-contained classroom, means that an educational program can be more nearly tailored to a student's needs and achievements than is possible in the conventional elementary school.

Two features of the educational process at Banneker appear to be having district-wide impacts. One is the use of curriculum consultants. Under the new district organization there will be 21 curriculum specialists to work with classroom teachers.

The emphasis at Banneker on special education support within the regular classroom organization is also having wider implications. The special education personnel are interested in exploring other applications of the Banneker approach.

When one examines the resources involved in the Banneker program it seems obvious that the program during 1970-71 cost substantially more than the conventional program. Indeed, the expenditure during 1970-71 was probably significantly more than $800 per student. On the other hand, from analysis of the resources and their costs, it seems reasonable to believe that School City could operate a modification of the BRL program for less than 5 percent more than a conventional program; and since that figure is based on assumptions of a rather generous staffing pattern, the cost could well be no more.

THE EDUCATIONAL PRODUCTS

Cognitive achievement averages on standardized reading and mathematics tests are improving. The question of the relative emphasis at Banneker on reading and mathematics skills compared with other subject matter areas remains a matter of contention. School City and most parents seem to approve of the present emphasis. The State of Indiana would like to see more time devoted to other subjects.

The program appears to be having success with students who formerly had difficulty mastering the conventional Gary program. There is some question about whether the Banneker program is sufficiently challenging for gifted students. Apparently, the program at the end of the year was expanded with these students in mind. Some parents, teachers, and supervisors feel that the initial difficulties with materials for the top ranks of students have been overcome.
The program seems to have had generally beneficial affective impacts. However, BRL's desire for a more humanistic approach, with a greater stress on self-discipline, has run up against the Gary community's dislike of "permissiveness" and its strong desire for strict discipline in the schools.

The program generated friction within the faculty at Banneker, within the ranks of Gary teachers, between School City and the Gary Teachers Union, and between School City and the State Department of Education. Most of the sources of friction seem to have been eliminated or at least reduced to a very low level. This reduction in friction was not accomplished easily and there are some aftermaths. For example, it now appears likely that paraprofessionals will be included in a bargaining unit of the Gary Teachers Union.

It should be emphasized that one of the important features of this program, if not the most important, is that it has a four-year span. Analysis of the impact of the program on the educational product should properly await the end of the period assigned BRL. At this point in time it appears that the omens are favorable. Nonetheless, the program has not lacked for controversy and not all the controversial questions have been resolved. The major issue still open is the extent to which reading and mathematics skill-improvement will be correlated with, or conflict with, improvement in other educational areas.
VII. IMPLICATIONS FOR OTHER PERFORMANCE CONTRACTING PROGRAMS

The history of the Banneker project to date has some broad implications for school districts considering a performance contracting program. First and foremost is the advantage of a multiyear program. If the Banneker program had been the usual one-year performance contract, most results of this year's effort would be irrelevant. Under the Gary arrangement, BRL is in a position to restructure its efforts.

Another and related issue is that any performance contracting outside of the reading and mathematical skills area requires a substantial development effort. The Banneker program is pressing the educational state-of-the-art. Performance contracts that span a wide range of subjects run the hazard, at this stage of the game, of encountering a lack of relevant materials and a lack of widely accepted achievement tests.

A third implication concerns the usefulness of performance contracting as a change-agent and as a way of organizing demonstration and development projects. Banneker is different from the usual school. It is perhaps not as different as its originators wished, but there is no gainsaying that it is a significant departure from the conventional Gary school.

It is doubtful that such an experimental effort could have been mounted in-house, or even as a contractor's effort, without the performance-payment arrange-
ment. There is nothing totally innovational about the BRL program. The Sullivan materials have been used in many locations, including Gary. Differential staffing is a well-known concept. Modular schedules and ungraded schools are also well known. The goal of an individualized curriculum is so well accepted as to be a shibboleth. Given a measure of determination, any school district could put together a package like the Banneker program. But a large number of radical changes had to be made simultaneously. It is difficult though not impossible to generate such widespread and thorough change from inside a going organization. It is often operationally easier for someone outside the system to act as a change-agent.

It is not likely that Gary or any other school district would permit a contractor to engage in an extensive and controversial reorganization such as that at Banneker without some performance "guarantee" or payment arrangement geared to achievement. Two features of the program seem to have been essential for obtaining public acceptance: first, the assurance that the program would cost no more than a conventional program, and second, the BRL would "guarantee" achievement, i.e., refund payment for each student not at the national norm on a standardized test at the end of the program. The "guarantee" feature of the contract seems to have been an essential element in making Gary willing to experiment with a substantial change in its educational process.

Finally, the Banneker program generated considerable friction and opposition. Other programs that also involve substantial revisions of the education process and particularly of staffing levels are also sure to run into legal, administrative, and personnel difficulties. The Gary experience, however, suggests two implications. First, much of the friction can be lessened if the parties on both sides seek to minimize it; a less cavalier attitude on the part of BRL, for example, would have made life easier for all concerned. Second, and most important, with some effort it appears that most of the legal, administrative, and personnel difficulties can be resolved.

Whatever the final outcome of the Banneker program, it should go down in educational history as one of the boldest and most interesting educational experiments in the United States. It deserves the attention of everyone interested in the current educational scene.

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But note the discussion on p. 33ff. that calls this assurance into question.
Appendix A

CONTRACT BETWEEN BEHAVIORAL RESEARCH LABORATORIES AND SCHOOL CITY OF GARY

AGREEMENT

THIS AGREEMENT, entered into this 22nd day of September, 1970, between BEHAVIORAL RESEARCH LABORATORIES, a California corporation (hereinafter called "BRL"), and the SCHOOL CITY OF GARY, INDIANA, acting by and through the BOARD OF SCHOOL TRUSTEES OF THE SCHOOL CITY OF GARY, INDIANA (hereinafter referred to as the "BOARD").

WITNESSETH:

WHEREAS, The Board has determined that it must implement a more effective and efficient educational program for those students under its jurisdiction who are achieving basic learning skills far below their capacities, that such program must foster more positive attitudes and a greater motivation for learning in such students and that the Board accordingly has instituted and is implementing a Right to Learn Program, consisting of (i) programs based on educational priorities, (ii) staff development, and (iii) community involvement; and

WHEREAS, as part of such Program, the Board is establishing an inner city public elementary school, housing grades kindergarten through six (The "Curriculum Center School"), organized around curriculum centers, providing for a minimum of 700 students and permitting each student to learn in a given subject area at his optimum speed with maximum attainment, and
WHEREAS, it is necessary in implementing such Program to retain a private firm skilled in such area to act as consultants to assist in establishing a school thus organized, under the supervision and control of the Board, such firm to use its best efforts to recommend plans and assist in their implementation to raise the achievement levels of underachieving students in such school up to or above national norms in basic skills while at the same time improving the ability and working conditions of teachers without increasing the cost of education; and

WHEREAS, BRL is engaged in the development, marketing and implementation of educational systems and the distribution of supplemental programmed instructional materials and has submitted a proposal for consultative action and guidance in implementing such Program and establishing such Curriculum Center School; and

WHEREAS, the parties recognize that under Indiana law the responsibility to provide and supervise the educational program and courses of study for the children in the School City of Gary is vested in the Board of School Trustees, establishing procedures and policy and acting through its designated employees (such Board, thus acting, being referred to as the "Board"); and

WHEREAS, The Board has determined that currently underachieving children are possessed of the necessary learning ability and will reach their proper learning level when educational methods are devised to develop their learning potential, and that new approaches directed toward such students must be considered as means to bring such students up to or above national norms, and

WHEREAS, the policy of the Board must be implemented solely through and in accordance with applicable Indiana statutes and duly adopted regulations ("Indiana Law") relating among other things to curriculum, licensing of teachers, and purchase of supplies;

NOW THEREFORE, in consideration of the premises and the mutual covenants herein contained, the parties hereto hereby agree as follows:

1. Employment

The Board hereby retains BRL, and BRL hereby agrees, to provide the services on the terms and conditions herein set forth for a period of four (4) years commencing July 1, 1970, and terminating on July 1, 1974, unless sooner terminated as provided in paragraph 19.

2. Nature of Services

(A) Planning, Organization and Staffing of Curriculum Center
Prior to the beginning of the 1970-71 school year, BRL, as hereinafter more particularly set forth, shall develop plans for organizing and staffing the Curriculum Center School for a minimum of 700 students to be created at Banneker Elementary School in Gary, Indiana (the "Center"). BRL, in all matters under supervision and control of the Board, shall:

1. Develop a curriculum in accordance with Indiana law and regulations and with any additional standards adopted by the Board;

2. Meet with teacher, parent and community groups and conduct workshops and discussions with respect to administration, organization and curriculum development;

3. Conduct at least four community meetings in order to provide further information, determine parents' views and enlist support for the Center;

4. Conduct a training and development program for staff and community members in respect to the objective, philosophy and methods of student centered instruction, differentiated staffing, non-graded curriculum and other techniques that will be used in the Center;

5. Establish curriculum objectives, physical and organizational arrangements of the Center, staffing assignments and patterns, and procedures for maintaining individual student profiles;

6. Arrange, with the Board's administrative staff, for the provision of instructional materials, supplies and equipment to be used in the Center, subject to applicable Indiana Law;

7. Direct intensive pre-service training for staff, orienting the staff to the individualized student-centered approach to be used in the Center, including role-playing sensitivity training, and individual interview techniques;

8. Provide, subject to applicable Indiana Law and working with the Board's administrative staff, manuals, films, video and audio tape equipment, and other materials required for staff development programs;

9. Prepare a yearly calendar of activities connected with the Center, including staff development programs, parent information and participation activities and a series of opportunities for other members of the Gary School community to observe and work in the Center.

(B) Curriculum Center

Commencing with the 1970-71 school year and continuing through
the 1973-74 school year, BRL, under the supervision and control of the Board, shall plan the operation of the Center, using its best efforts in such plan to raise the achievement levels up to or above national norms in basic skills. The 1973-74 school year, unless otherwise determined by the Board, shall be a transition period in which BRL's participation in the Center planning will be phased out in an orderly manner. Specifically, but not by way of limitation, BRL shall in each school year perform the following services:

1. Designate all instructional materials, equipment and supplies, subject to Board approval and in accordance with Indiana Law;

2. Use its best efforts to establish a system to promote maximum student achievement in language arts and mathematics; utilizing appropriate techniques of instruction, such as student-centered instruction, differentiated staffing; and non-graded curriculum;

3. Carry on intensive staff development and in-service training with both professional and teacher personnel, utilizing latest techniques of staff development and emphasizing methods of formulating and achieving behavioral objectives, increasing achievement, and motivation of students and staff; improving work relations with colleagues and parents; and training personnel in the methods and objectives of the Curriculum Center so that the Board may use such employees to operate the Curriculum Center after BRL has been phased out of the program during the fourth year of this agreement;

4. Diagnose, prescribe, monitor, and help implement an individualized educational program for each child;

5. Present detailed plans for organizing instructional activities around a number of learning centers to which children will go to develop particular skills, with school staff members specializing in work at that center and at the direction of the Board assist in implementing such plans;

6. Present detailed plans and implement detailed procedures to use individualized instructional materials so that the children progress at their own rates of speed, moving in and out of learning centers according to schedules set up in consultation with school staff members; and at the discretion of the Board and, in accordance with Indiana Law, assist in implementing such policy;

7. Prepare plans for directing the organization and control aspects of the Center, including arranging monthly evaluation of each child's progress and the transmission of this information to the instructional personnel, arranging supervision of attendance and discipline and establishing procedures that will seek to free instructional personnel from clerical and recordkeeping duties;
(8) In cooperation with the Gary School Service Center, assist in maintaining all records and provide all information required by law;

(9) Make provisions, working with the Board's administrative staff, to provide clerical, health, and day-to-day custodial services of a quality at least equal to that provided in the other elementary schools in the School City. These services shall be purchased from School City or contractors approved by School City. The exterior and interior maintenance and repair of the Center shall be performed by the Board;

(10) Cooperate with School City in affording other School City teachers opportunities to visit and work in the Center as part of a city-wide staff development program;

(11) Use its best efforts to implement an effective and meaningful community participation program, sending brochures and newsletters to parents explaining the activities of the Center, disseminating news about the Center to local and other media where the Board or its administrative staff deems it desirable or necessary to the program, and providing parents with special materials to assist their children at home so as to stimulate learning and achievement.

3. Staff

BRL shall make recommendations for the selection of the staff of Banneker Elementary School by the Board which it is contemplated shall (based upon an assumed enrollment of 800 students) consist of (i) a Center manager who will cooperate in directing the organization and non-academic affairs of the school, and recommend selection of the learning director; (ii) the learning director who shall have the status of a principal and who will, subject to control of the Board, select the curriculum manager; (iii) five curriculum managers, duly licensed as teachers, each in the area of reading and language arts, mathematics, social studies and foreign languages, science and enrichment (arts and crafts, music, drama and physical education). The curriculum managers, together with the learning director, will supervise choice of specific approaches and materials, and select the assistant curriculum managers; (iv) fifteen teachers serving as assistant curriculum managers who will direct learning supervisors and who will be licensed or provisionally licensed in accordance with Indiana law. (v) twenty learning assistants who will be teachers' aides and who will, to the extent practicable, be chosen from parents of children attending Banneker, (vi) three School City custodians and (vii) two clerical employees. The staff personnel must have such licensing and accreditation as may be required under Indiana Law; and to this end, the Board will cooperate with BRL in the assignment to the Center of qualified and certified teachers to teach in areas of reading and the language arts, mathematics, social studies and foreign languages, science and enrichment (arts and crafts, music, drama and physical education). All staff members who are School City employees shall remain such receiving compensation and related benefits from
the School City of Gary. All such School City employees assigned to the Center shall remain under the supervision and control of the Board.

4. Curriculum

The curriculum of the Center shall meet all applicable standards of the State of Indiana and of the Board, and shall include (i) a science component, including basic experimentation, development and sharpening of individual powers of observation, exercises in principles of logic, environmental education, health and safety instruction; (ii) a social science program including black history, foreign languages, economics, government and society that promotes understanding of and respect for institutions and the change of institutions by lawful means; (iii) an enrichment program, including choral and instrumental music, arts and crafts, and physical education; (iv) literature; (v) mathematics and (vi) reading and language arts.

5. Consideration

In consideration for the services rendered pursuant to this Agreement, the School City shall pay BRL for each school year an amount equal to the annual per pupil ADA current expenditure costs, grades 1 through 12, as taken from Form 9A, Annual Financial Report of Indiana Superintendent of Public Instruction, times the active enrollment as of October 30 for Banneker School, plus any reimbursement the Board receives from Federal authorities for compensatory services BRL has, is or will provide at the Center.

The foregoing consideration shall be payable as follows:

A. 25% of the estimated amount of such consideration on September 1 of the school year.

B. 10% of the estimated amount of such consideration on the first day of the following month of the school year to and including May, less annual current expenditures paid by School City as below described:

(a) Employee salaries.

(b) Fringe benefits, employer retirement contributions, employer taxes, and other employer contributions.

(c) Custodial supplies and materials.

(d) Laundry and dry cleaning costs.

(e) Utilities: water, electricity, fuel, telephone, etc.
(f) Vandalism detection services.

(g) Insurance costs.

(h) 2% of the ADA current per pupil expenditure costs for administration, overhead, and business services.

(i) 3.2% of the ADA current per pupil expenditure costs for maintenance.

(j) Materials required by Indiana law to be purchased and/or furnished to the Center by the School City.

C. Immediately following July 30 of each school year, an adjustment shall be made so that the payments based on estimated amounts shall conform to actual amounts. Such adjustment may be made earlier as of any month-end when it is apparent that there is a disparity between anticipated or estimated and actual costs.

D. The May, 1974 final payment shall be withheld until after July 30, 1974, for final adjustment of consideration less the amount of any expenditures paid by School City as previously described for May and June, 1974.

6. Evaluation

BRL will subcontract with an independent evaluator, chosen in conjunction with the Board, the approval of the Board and BRL to the selection of such independent evaluation to be reasonably given, to make a thorough and meticulous evaluation of the program and its results and to report its findings to the Board and BRL. The Board, BRL and the evaluator will develop nationally standardized tests. In addition to standardized testing of student achievement in basic skills, the evaluator will assess the benefits of the program in other academic areas and measure progress in areas such as student, staff and parent satisfaction and motivation, response to the program among the school community; and effect on attendance and discipline.

The evaluator shall monitor the planning and organization phases of the program and administer standardized tests in September and June. The evaluator shall also assist in the preparation of measurable instructional and social objectives of the program.

The evaluator shall provide an evaluation design by September 1, 1970. Formal objective assessments will be made by the evaluator in January 1971; June, 1971; January, 1972; June, 1972; January, 1973; and June 1973.
BRL shall hire a second independent evaluator in September, 1970, in order to provide an independent audit of the original evaluation design. The auditing agency will also review and report on each formal objective assessment.

7. Guarantee

BRL makes the following guarantee with regard to any student enrolled in the Center for each applicable school year (a school year consisting of attendance of at least 150 days during the course thereof):

(i) Each student enrolled in the program for three (3) full consecutive years will perform at least at grade level at the end of the third year, as measured by nationally recognized tests; (ii) Each student enrolled in the program for a full school year but for less than three years will each year achieve at least a year's advancement in reading and mathematics for each such year when he is enrolled, as measured by nationally recognized tests, or in the case of any student who cannot read at the beginning of any school year, that he will score at least in the 50th percentile on a nationally recognized reading readiness test.

If a student does not achieve the results guaranteed BRL will refund the entire fee due it for each student that is attributable to the instructional phase of the program for the applicable guarantee period. For the purpose of this agreement, cost attributable to the instructional phase of the program refers to all expenditures with the exception of clerical and custodial costs.

Such guarantee shall not be operative, however, if the Board does not or cannot legally:

(A) Make facilities at Banneker Elementary School open and available at all times during the term hereof to BRL necessary to perform its services for the Center;

(B) Provide BRL, upon request, with all relevant information and data concerning the students to be enrolled in the Curriculum Center or concerning the Gary, Indiana school populace;

(C) Assure that the Center is open and available to all professionals and teachers' aides in the City of Gary for observation, training, internship, and evaluation, and to the community for community activities.

(D) Upon fifteen (15) days written notice from BRL, accept for reassignment any teacher or administrator who BRL advises is not suitable for work in the Center, or honor the written request of any staff member for reassignment from work in the Center;

(E) Substantially follow the plans, recommendations and procedures reasonably made or provided by BRL.
1. Insurance Coverage and Liability

The Board shall include the Center within the coverage of any and all liability insurance contracts; however, this agreement shall not impose any liability or duty upon the Board for the acts, omissions, liabilities or obligations of BRL or its employees, subcontractors, or agents.

9. Modifications

The Board may from time to time request changes in the scope of the services of BRL to be performed under this Agreement. Such modifications, including any increase or decrease in the amount of BRL's compensation, which are mutually agreed upon by the parties hereto, shall be incorporated in written amendments to this Agreement.

10. Compliance with Local Statutes, Laws and Regulations

BRL shall comply with all applicable laws, ordinances and codes of state and local governments, including the rules and regulations of the Board. The Board shall within the scope of applicable laws, agreements, and regulations, cooperate with BRL and seek such modifications as may be necessary to assist BRL in carrying out its contractual requirements hereunder.

11. Progress Reports and Inspection

BRL will make progress reports and other reports as required by the Board or the Superintendent of Schools of the School City.

12. Assignability

No rights or obligations of BRL under this Agreement, including but not limited to the right to receive money pursuant to the terms above, shall be assignable without the prior written consent of the Board, except a right to receive money may be transferred or assigned by operation of law.

13. Successors and Assigns

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

14. Time is of the Essence

Time is of the essence of this Agreement.

15. Notice
Any notice or other communication required or permitted to be given hereunder shall be deemed properly given if personally delivered or deposited in the United States mail, postage prepaid, register or certified, addressed to:

Behavioral Research Laboratories
Attn: George H. Stern
866 United Nations Plaza
New York, New York

or to the Board:

Board of School Trustees of
School City of Gary, Indiana
Attn: Superintendent of Schools
620 East 10th Place
Gary, Indiana 46402

or to such other address as may from time to time be designated in writing by the respective parties.

16. The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of Indiana.

17. Miscellaneous

The parties hereto shall not be liable to the other or any third party for any failure to perform their respective obligations under this Agreement due to any cause not within their respective control including, but not by way of limitation, fire, strike, or Acts of God.

18. Cancellation or Termination

This Agreement may be cancelled or terminated by either party upon 120 days notice in writing by either party to the other. In such event BRL will be entitled to receive the payments provided for herein prorated to the effective date of cancellation. BRL may not, however, terminate the Agreement during the latter half of the third school year (other than termination for a breach or anticipatory breach of the Agreement by the School City) unless BRL shall have attained a success ratio equal to fifty per cent (50%) or more on the guaranteed portion of this Agreement for the prior two school years. This Agreement shall terminate immediately if this Agreement is declared illegal by a court having jurisdiction of the matter, unless the parties hereto modify the Agreement in such a manner as to cure any such illegality. In the event of such termination, BRL shall be entitled to receive from School City the portion of the consideration BRL would have been otherwise entitled to receive as of the date of such termination, less any portion which the School City would not legally have been able to other-
wise expend for the materials and services provided for by BRL under this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

BEHAVIORAL RESEARCH LABORATORIES
/s/ George H. Stern, President
/s/ John A. Johnson, Secretary

BOARD OF SCHOOL TRUSTEES OF THE SCHOOL CITY OF GARY, INDIANA
/s/ Alfonso D. Holliday II, M.D., President
/s/ Joe A. Torres, Secretary
Appendix B

CONTRACT BETWEEN BEHAVIORAL RESEARCH LABORATORIES AND CENTER FOR URBAN REDEVELOPMENT IN EDUCATION (CURE)

AGREEMENT dated as of October 5, 1970 between Behavioral Research Laboratories, Inc., a California Corporation, 866 United Nations Plaza, New York, New York 10017 (hereinafter "BRL") and the Center for Urban Redevelopment in Education (CURR), Inc., a New York Corporation, 8 Wade Road, Latham, New York 12110 (hereinafter "CURE").

CURE agrees to serve for a three-year period as evaluator of the Gary Contracted Curriculum Center at Banneker School, Gary, Indiana. CURR agrees to carry out the evaluation design submitted in its proposal, dated August 26, 1970, and agreed to by the staff of BRL as well as the staff of the Gary School City.

The evaluation will include:

(a) A standardized testing program as detailed in CURR's proposal for 850 students;

(b) Serving as monitor to the project to protect both parties to
the contract by the objective interest of an independent outside agency;

(c) Assessment of the benefits of the program in areas other than basic skills, such as measurement of progress in student, staff and parent motivation and satisfaction; reactions to the program of the school community; effects on attendance and discipline, etc.;

(d) Coordination of the testing program at Banneker School with other citywide and statewide testing programs;

(e) Review of curriculum offerings to determine appropriateness, variety and pupil participation (will include creative arts and physical education);

(f) Measurement of student reaction through interviews;

(g) Measurement of staff, parents, community reaction through interviews and questionnaire techniques.

The timetable for the evaluation will be as follows:

September - Standardized testing for all pupils K-6.
January - Sample standardized testing of 20% of pupils of each grade. Continued interviews with staff, parents, pupils and community.
February-May - Monitoring of the program with periodic reports to Gary and BRL.
June - Standardized tests to all students.
July 31 - Reports on evaluation to Gary Superintendent and BRL.
CURE agrees to report regularly on the progress of the evaluation as well as its monitoring activities to the President of BRL as well as to the Superintendent of Schools of Gary. No additional reports will be made by CURE. Further distribution of the report will be undertaken by the President of BRL or the Gary Superintendent. The official bimonthly reports will be written, but frequent telephone or letter reports will be issued as needed to both parties.

CURE agrees to provide administrative personnel to conduct the testing program, but understands that the teachers in Banneker School will administer the tests within their own classrooms.

CURE understands that in the event of the cancellation of the major contract between the School City of Gary and BRL for the Contracted Curriculum Center, no further services will be performed under this contract. CURE will be paid by BRL for all materials used and services rendered up to the time of the cancellation.

Due to the fluctuation in the cost of materials for the testing program, the cost of the evaluation program for the second year of this contract will be negotiated prior to the close of the present school year. The contract for the third year will be negotiated prior to the close of the 1971-1972 school year.

The relationship of CURE, its directors, officers, agents or employees to BRL pursuant to this agreement shall be that of independent contractor and not of principal and agent, employer and employee, or master and servant, or any similar relationship.

IN WITNESS WHEREOF, the parties have duly executed this agreement as of the date first written above.
BEHAVIORAL RESEARCH LABORATORIES, INC.

BY

President

SEAL
Attest

Secretary

CENTER FOR URBAN REDEVELOPMENT IN EDUCATION (CURE), INC.

BY

President

SEAL
Attest

Secretary

POSTSCRIPT BY CURR:
While the contract is signed by BRL and CURE, School City's Board of Education chose the evaluation on the basis of competitive proposals submitted to them. Thus the Gary Board of Education selected the evaluator, but BRL pays the evaluator from its funds received from the operation of the Banneker Center.