PACE

POLICY ANALYSIS FOR CALIFORNIA EDUCATION

Policy Paper No. PC87-11-12-EMCF

School-To-Work and Academy Demonstration Programs: 1986-87 Evaluation Report

Charles Dayton and Alan Weisberg

November 1987

Directors

James W. Guthrie
University of California
Berkeley

Michael W. Kirst
Stanford University

The authors wish to express their appreciation to John Evans, David Stern, James Guthrie, and Jacob Adams for their assistance and advice in preparing this report.

Additional copies of this paper, PC87-11-12-EMCF are available by sending $7.00 per copy to:

PACE
School of Education
University of California
Berkeley, California 94720

CHECKS PAYABLE TO THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
(California residents add appropriate sales tax.)

Policy Paper No. PC87-11-12-EMCF
Policy Analysis for California Education (PACE)
Berkeley, California
November 1987

Policy Paper No. PC87-11-12-EMCF

School-To-Work and Academy Demonstration Programs: 1986-87 Evaluation Report

Charles Dayton and Alan Weisberg

November 1987

Charles Dayton is a policy analyst with PACE.

Alan Weisberg is a policy analyst with PACE.

This paper was sponsored and published by Policy Analysis for California Education, PACE. PACE is funded by the William and Flora Hewlett Foundation and directed jointly by James W. Guthrie and Michael W. Kirst. The analyses and conclusions in this paper are those of the authors and are not necessarily endorsed by the Hewlett Foundation.

This evaluation was funded by a grant from the Edna McConnell Clark Foundation.

The authors wish to express their appreciation to John Evans, David Stern, James Guthrie, and Jacob Adams for their assistance and advice in preparing this report.

Additional copies of this paper, PC87-11-12-EMCF are available by sending $7.00 per copy to:

PACE
School of Education
University of California
Berkeley, California 94720

CHECKS PAYABLE TO THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
(California residents add appropriate sales tax.)

Policy Paper No. PC87-11-12-EMCF
Policy Analysis for California Education (PACE)
Berkeley, California
November 1987

Executive Summary

The School-to-Work and Academy Demonstration programs, funded under the Edna McConnell Clark Foundation's "Programs for Disadvantaged Youth," attempt to improve school retention and transitions to work for high school students in seven cities.

This evaluation of the School-to-Work and Academy Demonstration programs entails both process and outcome components. The process component relies upon a case study description of each program, including a summary of its setting, design, management structure, and target group. Information for this segment of the evaluation derives from site visits, staff questionnaires, interviews, observation, and discussions with program managers.

The outcome component employs a comparison group design in which both program students and a matched group of nonprogram students were tracked from the year prior to a program's start through each year of its operation. Data were collected on student retention, attendance, credits earned, courses failed, grade point averages, and standardized test scores. In addition, questionnaires were administered to program students before and after receiving program services.

Seven sites were included in the evaluation, which covers the 1986-87 school year: Chicago, Cleveland, Denver, Oakland, Pittsburgh, Portland, and Washington, D.C. Programs varied from site to site in both structure and age. Cleveland and Oakland, for example, were operating in their second year; Chicago, Denver, Pittsburgh, and Portland in their third; and Washington, D.C., in its sixth.

Four sites–Chicago, Pittsburgh, Portland, and Washington–offered multi-year, combined academic and job preparation programs; Denver offered a one-year academic and job preparation program; Oakland offered two or three-weeks of job search training; and Cleveland offered curriculum development training to teachers, with the intent of implementing revised curriculum during 1987-88.

Evaluation of student outcomes revealed varying effects from site to site and variable to variable. Most differences between program and comparison groups were not statistically significant. Those differences which were statistically significant are as follows:

In favor of program students–

- School retention, at all six sites with students
- Attendance, at one of two Chicago schools and in Pittsburgh
- Credits earned, in both Chicago schools and in one of two Washington schools
- Courses failed, in both Chicago schools and Portland

- Grade point averages, in both Chicago schools and Portland
- Standardized test scores, in one Chicago school, for math

In favor of comparison students–

- Courses failed, at one Denver and one Washington high school.

Responses from student questionnaires demonstrated that students were being exposed to more career-related lessons and experiences as a result of these programs, that most students viewed making career plans and gaining career-related skills in high school as important, that students felt their career opportunities had improved after enrolling in the programs, and that most students liked the programs.

A comparison of sites on certain context variables, and an analysis of their related success in terms of measurable student outcomes, provides certain insights into factors that lead to success. Those sites with a strong design (multi-year treatment, both academic and job preparation components, and focused job preparation and experience), good school and private-sector support, strong management, and sufficient time to develop had better results than those lacking one or more of these elements.

Contents

Policy Analysis for California Education

Policy Analysis for California Education, PACE, is a university-based research center focusing on issues of state educational policy and practice. PACE is located in the Schools of Education at the University of California, Berkeley and Stanford University. It is funded by the William and Flora Hewlett Foundation and directed jointly by James W. Guthrie and Michael W. Kirst. PACE operates satellite centers in Sacramento and Southern California. These are directed by Gerald C. Hayward (Sacramento) and Allan R. Odden (University of Southern California).

PACE efforts center on five tasks: (1) collecting and distributing objective information about the conditions of education in California, (2) analyzing state educational policy issues and the policy environment, (3) evaluating school reforms and state educational practices, (4) providing technical support to policy makers, and (5) facilitating discussion of educational issues.

The PACE research agenda is developed in consultation with public officials and staff. In this way, PACE endeavors to address policy issues of immediate concern and to fill the short-term needs of decision makers for information and analysis.

PACE publications include Policy Papers, which report research findings; the Policy Forum, which presents views of notable individuals; and Update, an annotated list of all PACE papers completed and in progress.

School-To-Work and Academy Demonstration Programs: 1986-87 Evaluation Report

This report provides a summary of evaluation information collected during the 1986-87 school year on seven of the Edna McConnell Clark Foundation's demonstration sites funded under its "Programs for Disadvantaged Youth." This is the third year such a report has been prepared utilizing student outcome data.

The programs share certain goals. First, they attempt to reduce high school dropout rates and to improve student transitions from school to work. Second, they target at-risk urban high school youth. Third, they include job preparation. Fourth, private-sector participation is stressed.

The programs are distinguished as well by their differences. Programs in Chicago, Pittsburgh, Portland, and Washington, D.C., offer three- or four-year services which include courses articulated year to year, academic and job preparation elements, exposure to the private sector in selected fields, and extensive enrichment components (for example, business speakers, field trips, and mentors). In contrast, the Oakland Step Ahead program offers 10 to 30 hours of job search training and unfocused job placement assistance plus limited enrichment activities. Denver's SWAP offers essentially a one-year program with academic and job preparation components, unfocused job placement assistance, and some enrichment activities. Cleveland's Partnership Program to this point has been a staff development curriculum writing project, with plans to implement its new curriculum in 1987-88.

Sites are also at different stages of development, and this fact should be considered in interpreting outcome data. Cleveland and Oakland completed their second operational year in 1986-87. Chicago, Denver, Pittsburgh, and Portland have completed three years. Washington has completed six years.

Evaluation Design

This evaluation includes both process and outcome components. The process component examines how programs have been implemented, and successes and problems in this respect. The outcome component examines whether there have been changes in student outcomes attributable to the programs.

As a result of Clark Foundation seminars on evaluation options held during July 1986, and subsequent Clark Foundation Advisory Board discussions, a decision was made to continue the evaluation of the foundation's demonstration sites essentially as they had

been conducted the two previous years, with one modification. This was to develop a case study description of each program, providing a context for the outcome data.

Thus, this report contains case studies of each site, with sections describing the programs' main elements (design, student profile, management, and setting), student outcome data, questionnaire responses, and a summary. These are intended to stand alone as reports to each site, as well as to be combined here in one report to the foundation.

Seven sites were included in this evaluation, down from 10 last year. East St. Louis dropped out when its program was terminated in June 1986. Boston no longer seemed appropriate, having developed extensively and with its own sources of data. And whereas data had been obtained from the Peninsula Academies evaluator (the American Institutes for Research) the past two years, that evaluation was not continued this year, so there were no data to report on that program.

Consistent with previous evaluations, comparison-group students were matched with program students at all sites where feasible, excepting only Oakland and Cleveland. A local data collector gathered information needed to compare dropout rates, attendance, credits earned, courses failed, grade point averages, and scores on standardized achievement tests. In addition, student questionnaires were completed by new incoming students in the fall and by all students at the end of the school year. Finally, questionnaires were completed by key staff from each program.

All sites were visited at least twice during the evaluation year by one of the study's authors. Site visits often coincided with a program event such as an advisory committee meeting or staff development workshop. Key program personnel and business individuals were interviewed, classes were observed, and, in most cases, discussions with participating students occurred.

Information from site visits and analyses of student outcome data constitute the core of case studies found in Part II. Part III provides cross-site comparisons and conclusions.

Job Readiness Program

Chicago, Illinois

The Job Readiness Program (JR) is an ambitious program bordering on a school-within-a-school format at two Chicago public high schools. Although the two schools–Dunbar Vocational and the Farragut Career Academy–are quite different, programs with similar goals have been implemented at each, aimed at keeping students in school and preparing them for work or postsecondary education. The program was created as a partnership between public schools and Chicago United, a business organization that emerged from the riots of the late 1960s with goals of job expansion, economic development, and improvement in the quality of education.

Now in its fourth year, JR has already graduated two small classes at Dunbar. In June 1988 it will graduate more than 100 seniors from Farragut and 26 seniors from Dunbar. Although the ultimate test of the program's impact will be the experience of these graduates, a factor not yet examined, there are many other signs of JR's success.

The program has experienced remarkable stability in its leadership both at Chicago United and the two schools. Growth in student enrollment has been steady; this year one of four students at Farragut will participate in JR. As will be demonstrated below, JR students are consistently outperforming comparison group students at both schools on most outcome measures. The summer employment program for students at each school has consistently met its goals and garnered considerable business support in terms of funding and jobs. Parent involvement and support is strong and business support continues to be substantial. Despite continuing fiscal woes, the Chicago public school system has increased its support of the program as Clark Foundation funding has declined.

Program Design

The Job Readiness Program (JR) began in September 1984. Dunbar began with 9th and 10th graders, Farragut with 9th graders, and new classes have been added each year. Students take a full academic schedule meeting all graduation requirements, but are block programmed into JR classes which tend to have slightly smaller class sizes. Unlike other students at Farragut, JR students generally do not have study halls. Instead, they take a heavier class load, including reading enrichment and math support–extra periods in basic skills.

Although called a "career academy," Farragut is more a comprehensive high school offering a general education to most of its students. Dunbar is truly a vocational school and

is somewhat selective in its admission policy. It offers a heavy block of vocational programming for all of its students, so the JR program here is less central and more supplemental.

In addition to the academic component, JR students at both schools participate in a counseling and job preparation program–a special class in career awareness and counseling. All Dunbar students enroll in one of several vocational clusters, receiving increasingly specific skills training for up to half of a school day as they approach their senior year. Farragut students receive an occupational survey class, gaining exposure to computer education, health, business machines, food service and business occupations by rotating through a series of 10-week survey classes.

Parent involvement is another program goal and is accomplished through frequent phone calls to and meetings with individual parents, special events (for example, special seminars and a business subsidized dinner), and regular parent nights.

Job experience is the final component of the program. Students go on field trips and hear career speakers, and all students who meet the program's standards for attendance and grades are placed and monitored in summer jobs. Seniors who so desire are helped with part-time jobs, and 18 of 24 of Dunbar's graduating JR class members worked part-time last year.

Chicago United organizes and supports the speakers, field trips, and job placement for the program. Summer placements in 1987 totaled 260 jobs–most in the private sector, but many also in nonprofit and government organizations through wages subsidized by grants received by Chicago United. The Kraft Corporation donated $90,000 in the summer of 1987 for this purpose. The program has not had a positive experience in utilizing the federally supported Summer Youth Employment and Training Program as a source of summer jobs.

Student Profile

Students are recruited into Job Readiness (JR) at Farragut from its feeder schools. JR staff visit the feeder schools; meet with counselors, students, and parents; and explain what the program has to offer. In general, the program seeks students who are viewed by their counselors and teachers as being in danger of not succeeding in the general program at Farragut, based on past patterns of attendance, grades, and discipline problems.

At Dunbar, which as a vocational school screens all of its incoming 9th graders, JR students are chosen from the freshman class. Here too, the focus is on selecting students who need special attention if they are to succeed in school. Dunbar generally has a

motivated student population, and JR tends to take the students who just barely met the school's admission criteria.

When attrition occurs at either school, new students are added. As mentioned, Dunbar and Farragut are quite different in both their curriculum and the kind of student who attends. Dunbar is a selective school and, as already noted, generally has more able students. Farragut is a neighborhood high school serving all who come through the door.

Enrollments continued to grow at each school in 1986-87. Table 2.1 displays program enrollment data by gender, race/ethnicity, and grade for Farragut and Dunbar. For the 1987-88 school year, Farragut's JR enrollment will exceed 500; Dunbar is slated to increase its enrollment to about 200.

Table 2.1 Job Readiness Enrollment

	Male	Female	White	Black	Hispanic	Total Enrollment
Farragut						
9th Grade	56%	44%	1%	52%	47%	131
10th	46%	54%	0%	56%	43%	132
11th	41%	59%	0%	72%	28%	133
Total Enrollment						396
Dunbar						
9th Grade	41%	59%	2% (other)	98%	0%	54
10th	45%	55%	0%	100%	0%	69
11th	67%	33%	0%	100%	0%	24
12th	80%	20%	0%	100%	0%	25
Total Enrollment						172

Program Management

Job Readiness (JR) is organized through a full-time program coordinator at each school, Gandy Heaston at Farragut and Delores Jackson at Dunbar, each of whom is a regular employee of the Chicago public schools. Until this year, the coordinators' salaries were supported by the Clark Foundation grant. In 1987-88, all of the Farragut coordinator's salary and half of the Dunbar coordinator's salary are being supported by the Chicago public schools.

The overall program director, Pat Morgan, is a Chicago United employee who helps supervise the two coordinators, works on all aspects of business involvement, staffs a business steering committee, and does everything else necessary to help the program meet its goals, including lobbying for the program within the schools and the community at large. She and the schools are supported by a job developer at Chicago United who works on summer and part-time job placements.

Some 40 teachers and counselors participated in JR in 1986-87, 12 at Dunbar and 28 at Farragut. Most teachers in the program teach at least two JR classes each day. The school coordinators, who have been with the program from its beginning, work for Chicago United in the summer as they monitor students on their summer jobs.

Chicago United was instrumental in beginning the program, working closely with school officials to select pilot schools. Through Pat Morgan, Chicago United continues to play a central, on-going management and support role each year. Business involvement is extensive and believed by everyone involved to be crucial to the program's success. In 1986-87, there were 50 career speakers in the two schools and many field trips to business sites. In addition to several thousand dollars in direct contributions by business, the equivalent of $65,000 in school supplies and equipment was donated by business. Corporate sponsors include AT & T, Kraft, the Chicago Tribune, Bell Laboratories, Allstate Insurance, and the Chicago Bulls.

By far the most ambitious and successful aspect of business involvement in the program has been the placement of students into summer jobs outside the existing federally sponsored summer jobs program for youth. Each summer the effort has grown, and corporate financial support has allowed for quality placements in nonprofits and government as well as private-sector job placement. Many students have returned to their placements for a second summer and some have kept parttime jobs during school with their summer employer.

Both JR school staff and students are aware of the support given to the program. Staff comment on the supplies they receive; students speak positively about summer jobs, field trips, and career speakers.

JR, especially at Farragut, is more than a small pilot program. Its total annual budget at Farragut, including business in-kind and direct contributions as well as teacher salary equivalents, is more than $1 million.

The Setting

Chicago is the nation's third largest city. Its overall population is about 40 percent black and 14 percent Hispanic. Its estimated poverty rate in 1986 was 21.9 percent versus a national average of 14.0 percent. Its Standard Metropolitan Statistical Area (SMSA) unemployment rate in 1986 was 7.9 percent (versus a national average of 6.9 percent), and its estimated youth unemployment rate was 21.6 percent.

Dunbar is located on the south side of the city, relatively near downtown, in an area of mixed income housing and considerable commerce. Farragut is on the southwest side of the city, in what can only be described as a very tough neighborhood. Getting a taxi to go to Farragut is not an easy chore.

The problems in Chicago's public schools, and especially in its high schools, are well documented. There have been numerous studies of the problem but none more dramatic than one recently done using Chicago schools enrollment, dropout, and test score data. In a study of the class of 1984, that is, students who were 9th graders in 1980, Designs for Change ("The Bottom Line: Chicago's Failing Schools and How to Save Them," 1985) found the following:

- Of the 39,500 students in the class of 1984, 21,000 did not complete high school by 1984.
- Of the 18,500 who did graduate, only 6,000 read at or above the national 12th grade average.
- Of the 18,500 graduates, 5,000 read below the junior high level.
- In nonselective, "segregated" high schools (Farragut falls into this category) only 9,500 of 25,500 students completed high school and of the 9,500 graduates only 2,000 could read at or above the level considered average in the rest of the country.

Table 2.2 compares the two JR schools with Chicago schools generally on a number of dimensions.

Table 2.2 Job Readiness and All Chicago Schools Compared

	Enrollment	Percent Black	Percent Hispanic	Percent Free or Reduced Lunch	Percent Dropout
Chicago	431,000	60.1	23.4	66.5(K-12)	44.9
Dunbar	2,308	100.0	0	35.0	37.2
Farragut	2,057	50.5	49.1	67.0	72.6

Median test scores at the two JR schools compare with test scores systemwide on the Test of Achievement and Proficiency (TAP) as indicated in Table 2.3.

Table 2.3 Test Scores of Job Readiness and All Chicago Schools Compared

	Chicago Public Schools		Dunbar		Farragut	
	Grade / Score		Grade / Score		Grade / Score	
Reading	9	31	9	40	9	21
	10	34	10	37	10	19
	11	36	11	39	11	18
	12	36	12	36	12	17
Math	9	28	9	35	9	21
	10	32	10	37	10	21
	11	32	11	36	11	21
	12	37	12	36	12	24

As the above numbers indicate, Farragut is one of Chicago's lower performing high schools, while Dunbar is an above average performing high school on dropout and test score dimensions. This fact makes the success at Farragut as reported below even more remarkable.

Student Outcome Data

The "hardest" form of data by which to judge the effectiveness of the Job Readiness Program (JR) is that related to measurable indicators of performance in school. These include dropouts, attendance, credits earned, courses failed, and standardized achievement test scores. The standardized TAP tests are administered in reading and language at each grade level.

The tables below demonstrate results from an analysis of data in these various categories. The "means" and "N"s (number of students contributing to each mean) are provided for both program and comparison group students, for their pre-program year, if available, and the 1986-87 school year. For several of the variables, the "N" is smaller because no pre-program data were available for comparison.

In addition, the difference between the two groups is shown, as is the "net change" after receiving program services. Difference scores are positive if program groups outperform comparison groups, and negative if the opposite is true. An asterisk next to a difference score indicates that the difference is significant at the .05 level of probability.

Scores have been grouped across grade levels in all cases; grade-by-grade breakouts are available but not presented here. Pre-program data from feeder schools for credits earned and grade point averages were either not available or too inconsistent to report.

Table 2.4 Job Readiness–School Dropouts

	Total Students	Dropouts	Percent
Dunbar High School			
Program	172	1	1%
Comparison	148	10	7%
Difference	---	---	6%*
Farragut High School			
Program	396	14	3.5%
Comparison	326	37	11.4%
Difference	---	---	7.9%*

Table 2.5 Job Readiness–Attendance

	Pre-program	1986-87	Net Change
Dunbar High School			
Program	96.6 (113)	96.0 (113)	-0.6
Comparison	95.2 (92)	92.7 (92)	-2.5
Difference	1.4	3.3	1.9
Farragut High School			
Program	95.1 (227)	92.0 (227)	-3.1
Comparison	93.2 (128)	85.2 (128)	-8.0
Difference	1.9	6.8	4.9*

Table 2.6 Job Readiness–Credits Earned

	1986-87
Dunbar High School	
Program	5.30 (159)
Comparison	4.43 (114)
Difference	.87*
Farragut High School	
Program	4.61 (326)
Comparison	3.34 (231)
Difference	1.27*

Table 2.7 Job Readiness–Courses Failed†

	Pre-program	1986-87	Net Change
Dunbar High School			
Program	.25 (119)	1.72 (119)	1.47
Comparison	.60 (88)	2.97 (88)	2.37
Difference	-.35	-1.25	-.90†
Farragut High School			
Program	.49 (222)	2.89 (222)	-2.40
Comparison	.63 (152)	4.03 (152)	-3.40
Difference	-.14	-1.14	-1.00†

† 1986-87 figures are cumulative; a negative difference indicates a superior program group performance on this variable.

Table 2.8 Job Readiness–Grade Point Average

	1986-87
Dunbar High School	
Program	1.78 (159)
Comparison	1.48 (114)
Difference	.30*
Farragut High School	
Program	1.56 (323)
Comparison	1.23 (226)
Difference	.33*

Table 2.9 Job Readiness–CTBS Test Scores

	Pre-program	1986-87	Net Change
Reading			
Dunbar High School			
Program	38.6 (121)	35.8 (121)	-2.8
Comparison	42.8 (82)	38.6 (82)	-4.2
Difference	-4.2	-2.7	1.4
Farragut High School			
Program	28.8 (202)	20.7 (202)	-8.1
Comparison	32.3 (118)	21.7 (118)	-10.6
Difference	-3.5	-1.0	2.5
Mathematics			
Dunbar High School			
Program	40.8 (121)	33.3 (121)	-7.5
Comparison	50.1 (84)	36.5 (84)	-13.6
Difference	-9.3	-3.2	6.1*
Farragut High School			
Program	37.7 (203)	25.2 (203)	-12.5
Comparison	35.0 (118)	22.0 (118)	-13.0
Difference	2.7	3.2	.5

These data show impressive positive differences favoring program students in virtually all measures except scores on achievement tests. For example, at the two schools combined, only 15 of 568 program students dropped out of school in 1986-87 versus 47 of 474 comparison students. In other words, more than three times as many comparison students dropped out of school. The difference in dropout rate proved statistically significant.

The positive outcomes for program students at both schools were statistically significant in attendance at Farragut, in credits earned at both schools, in courses failed at both schools, and in grade point average at both schools. And while only the mathematics test score difference at Dunbar met the statistical significance test, program students at both schools showed a smaller test score decline than comparison students. While this is a positive outcome for program students, it is also a distressing reality that mean scores for all students examined declined between their pre-program year and the 1986-87 school year at both schools.

With the exception of scores on standardized achievement tests, JR students showed significant, positive differences when compared to a like group of students at their school in attendance, dropouts, courses passed, credits earned, and grade point average.

Student Questionnaire Responses

A questionnaire was administered to students at the point they entered the program and again at the end of each school year. This form covered career-related experiences, plans and attitudes, as well as attitudes toward school, self, and the program. Responses from Dunbar and Farragut were grouped across all grade levels. Means are presented below by topic and school. Figures in columns under each school's name are percentages of students as they responded prior to their participation in the program (pre) and in the 1986-87 school year (post).

Table 2.10 Job Readiness–Student Questionnaire Responses

	Dunbar		Farragut	
	Pre	Post	Pre	Post
Career Related Experiences				
Have learned about choosing a career, finding a job, etc.	45	79	44	81
Have heard business speakers, visited companies, had a mentor, etc.	27	64	30	56
Have held a job	44	69	39	65
Career Related Plans and Attitudes				
Have a specific plan for what to do upon graduation from high school	29	46	24	54
Have a long term career goal	66	70	50	56
View making career plans in high school as important	92	92	89	91
View gaining job skills while in high school as important	95	95	90	88
Attitudes Toward School and Self				
Like school during the past year	73	74	61	70
Like self after the past year	86	87	76	83
Attitudes Toward the Program				
See good career opportunities in their future	37	80	32	76
See good chance of finding a job upon graduation	79	90	64	83
Have positive feelings about program	88	91	77	89

School Personnel Responses, Dunbar High School

Six Dunbar High School staff members completed the "School Staff Questionnaire," providing their perspectives on various aspects of the program. This included five of the program's teachers and a school counselor. Their responses suggest the following:

1. Collaboration with the business community increased significantly as a result of the program. Attitudes of staff toward this community generally improved as a result of increased knowledge acquired through this collaboration.

2. Few changes in the operation of the high school were required to accommodate the program, in terms of curriculum, facilities, and teachers' cooperative planning. The major changes required were on the part of the counseling staff–establishment of an area for job readiness counseling and the associated planning and requisitions to support that area.

3. The staff was unanimously satisfied with student selection procedures, and only slightly less satisfied with drop procedures–some feeling that "problem" students should be dropped as soon as a negative pattern is established and replaced with a student on a waiting list.

4. In comparing what existed previously for the program's target group with what JR provides, school staff saw no change in classroom facilities. There have been general improvements in career-related curriculum, instruction, counseling equipment, and books available, and vast improvements in exposure to business representatives.

5. Field trips, mentorships, shadow days, and summer and school-year jobs are all seen as "highly useful" student activities.

6. In rating changes stemming from the program, teachers felt that students' occupational knowledge, interest in school and learning, self-esteem, attendance, and grades were much improved.

7. Teachers rated other teachers in the school as more than slightly supportive of the program, counselors as generally "very" supportive, and administrators, unanimously, as "very" supportive.

8. All six respondents rated overall program planning as "excellent."

9. On a seven-point scale, the mean rating of the program "in concept" was 6.4, and "as implemented" to date, 6.0.

10. The program's greatest strengths were seen to be the quality of program management and counseling, a dedicated staff, and the pride and self-esteem evident among students. Its greatest weaknesses were described as lack of job-search assistance and insufficient time for counseling.

School Personnel Responses, Farragut High School

Twenty staff members from Farragut High School completed the "School Staff Questionnaire," providing their perspectives on various aspects of the program. Their responses suggests the following:

1. Collaboration with the business community increased significantly as a result of the program; very little change occurred in the attitudes of staff toward this community–they were already positive.

2. Only minor changes in the operation of the high school were required to accommodate the program, in terms of curriculum, facilities, and teachers' cooperative planning.

3. The staff was satisfied with student selection and drop procedures; there was some feeling that "problem" students who should have been dropped remained in the program, while more able students were not included as participants.

4. In comparing what existed previously for the program's target group with what the academy provides, there were general improvements in classroom facilities, career-related curriculum, instruction, and counseling equipment and books available, and stronger improvements in exposure to business people.

5. Field trips, mentorships, shadow days, and summer and school-year jobs were all seen as "highly useful" student activities.

6. In rating changes stemming from the program, teachers felt that students' occupational knowledge, interest in school and learning, self-esteem, attendance, and grades ranged equally from "somewhat better" to "much improved."

7. Teachers rated other teachers and counselors in the school as "somewhat" to "very" supportive of the program, and administrators, unanimously, as "very" supportive.

8. Fifteen of the 20 respondents rated the overall program planning as "excellent"; three, "good"; one, "average"; and, two "don't know."

9. On a seven-point scale, the mean rating of the program "in concept" was 6.2, and "as implemented" to date, 6.0.

10. The program's greatest strengths were seen to be the director and increased student involvement in the community (and vice-versa). Its greatest weaknesses were described as the lack of parent participation, proper grouping of students, and useful materials, equipment, and books.

Summary

Now in its fourth year, the Job Readiness Program (JR) in Chicago has met nearly all of its goals. Students in the program are staying in school more, failing courses less, earning more credits, and getting better grades than those in a matched comparison group. They are showing greater progress from year to year. Their test scores are declining, but at a slower rate than those of comparison students.

Business involvement in JR is deep and not superficial, and plays an important role in supplementing classroom activities. Strides have been taken to enlist parent support. It is clear that the Chicago program has proven a success. The only important data missing now is the experience of JR students after graduation, and there are plans to conduct a follow-up study of the 1987 graduating class.

There are several factors which seem to have contributed to the program's success:

- The school administration has supported the program, to the point this year of picking up most of the added costs previously paid by the Clark Foundation. Indeed, from the very beginning the Chicago schools were required to make a significant contribution to JR. It was never just an "outside funded" program.

- Chicago United aggressively helped formulate and monitor the program's progress. It also mobilized an extraordinary degree of business support.

- Both Farragut and Dunbar have been blessed by highly competent, experienced, on-site coordinators who were regular school employees before JR arrived. They were able to earn the respect of teachers, counselors, and administrators at their respective schools. The coordinators have stayed with the program and provided continuity.

All of this success has not come easily. Staff have consistently been willing to take the extra steps needed. As this report was being written, the Chicago schools were in the fourth week of a teacher strike, yet JR staff were working on their own time with the senior class, helping them prepare for and find part-time jobs.

Achievement at a difficult school like Farragut is particularly noteworthy. As the program begins a new year serving one in four students, clearly the impact at Farragut is not confined to a few lucky students. The changes which have occurred so far are helping to achieve a more general transformation at Farragut, evidence that high schools can reform themselves and better serve at-risk students.

The Partnership Program

Cleveland, Ohio

1986-87 was the second operational year for the Cleveland Partnership Program. This program is modeled on the curriculum and staff development program in the Washington, D.C., Public Private Partnership. A liaison was formed with the Washington project, and 19 Cleveland teachers were trained in part by Washington, D.C., staff, both in Cleveland and Washington. The Greater Cleveland Roundtable formed a liaison to the project, as did the American Society for Training and Development (ASTD), to assist in curriculum development. An active Advisory Committee was established, with corporate representation, to assist with externships, evaluation, and curriculum development.

Perhaps most encouraging, the program's new managers, based at Case Western Reserve University, vigorously sought support from the Cleveland public schools. This resulted in $32,000 in support of curriculum development and a commitment of $90,000 for next year to pilot the new curriculum. Efforts will continue to provide externships and develop curriculum, and will be extended to training the implementors of the curriculum and placing students in jobs.

Program Design

The Cleveland program, like Washington's, is focused on staff and curriculum development. Teachers are provided a summer externship in the private sector, to increase their knowledge of work and gather information they can convey to students. They subsequently attend a series of workshops during the school year to learn the skills of curriculum development and to write career-related curriculum for their high schools.

Twenty-four Cleveland teachers from two high schools, East and John Adams, began this effort in 1986-87. Over the summer of 1986, 14 of these teachers were provided externships in organizations including an engineering firm, bank, law firm, publishing company, hospital, manufacturing company, and amusement park. Teachers generally worked at one position, but were given an opportunity to observe a range of jobs within the company. They learned skills related to their assignments, but more generally they learned about private-sector work environments and demands.

The curriculum writing workshops began in October 1986 and continued through May 1987. Five of these took place in Washington, D.C., involving six project leaders.

Training was conducted by staff from the Washington project who were expert in the curriculum development process and products developed there. Ten additional workshops were held in Cleveland, five of them involving six of the Washington teachers. There were five main topics on which these 15 workshops focused:

- Developing learning objectives
- Instructional events and lesson plans
- Assessment and quality monitoring
- Teaching strategies and classroom management
- Externships as a research activity

The district provided release time for these workshops and covered the cost of substitutes.

While formal transfer of externship experiences and new curriculum to students will begin next year, in fact teachers began using these with students in many ways this year. Teachers discussed with students their externship experiences and the demands of work, brought in speakers from their companies, had students practice preparing resumes, and conducted mock interviews. Many teachers also felt that their teaching had been influenced by the workshops and their competency-based theme, so that their classes were better focused around clear lesson plans. And 10 teachers were planning to participate in another externship over the summer of 1987.

Teacher Profile

Although selection criteria for teachers' involvement in the Partnership Project were established early, teachers were unaware of them, and it is not clear how fully they were employed. The criteria included teachers' support for the program concept, their ability and experience as teachers, and their willingness to participate in curriculum writing activities. When asked why they became involved, all cited support for the concept of preparing students for work. Many also mentioned the externships, because of both the work experience and additional income.

Of the 24 teachers who began the program in the fall, five dropped out during the year, two due to illness, two due to over commitments, and one by request of the program. Of the 19 teachers involved throughout the year, eight were from John Adams High School and 11 from East High School. Most are veteran teachers, with 10 to 15 years experience. All but two have a Master's Degree. Eight of the teachers come from academic fields, three from special education, six from vocational education, and two are administrators.

Program Management

The program is managed by a half-time project director, Dr. Albert Abramovitz, who is a past school superintendent; and a full-time project manager, Wayne Carter, a veteran Cleveland teacher. They are based at Case Western Reserve University, in the School of Applied Social Sciences (SASS), the grant recipient. The dean of SASS, Dr. Arthur Naperstak, has himself contributed substantially to the project. SASS managers report to an Advisory Committee and have frequent contact with lead teachers and principals who coordinate efforts at each high school.

The Advisory Committee became more active this year. It includes several private sector representatives from supportive companies, administrators from the two schools and district, a representative from the American Society for Training and Development, and the project director and manager. It played a role in obtaining externships, providing input to the curriculum, overseeing evaluation, and reviewing the new curriculum (largely through ASTD). The committee has general meetings about four times a year, with subcommittee meetings more often.

The Setting

Cleveland's school system has over 73,000 K-12 students. The high schools involved in the program, John Adams and East, serve an inner-city, at-risk student population. Table 3.1 displays the makeup of these two schools and the district in terms of race/ ethnicity, family income, and high school dropouts.

Table 3.1 Partnership Program and Cleveland Schools Compared

	East	John Adams	District
Race/Ethnicity			
Black	82%	88%	70%
White	13%	11%	24%
Hispanic	3%	-	5%
Other	2%	1%	1%
Percent of Students On Free/Reduced Lunches	59%	51%	70%
Dropout Rate	11%	18%	4%

The free/reduced lunch figures tend to understate low-income rates at the two program high schools because the free lunch program is voluntary, and, particularly at the high school level, many students refuse to apply for the program out of social embarrassment. The district rate covers grades K-12.

Cleveland's population is 44 percent black, 3 percent Hispanic, and 53 percent white. Its estimated poverty rate in 1986 was 24 percent, versus a 14 percent national average. Its Standard Metropolitan Statistical Area (SMSA) overall unemployment rate in 1986 was 7.5 percent (compared with a national average of 6.9 percent), and its estimated youth unemployment rate was 19.9 percent.

School Personnel Responses

Information in this section comes from two sources. A local data collector, a graduate student at Case Western Reserve, interviewed a cross-section of 11 teachers involved in the program in 1986-87, using a structured set of questions. Included in this sample were lead teachers at both schools. In addition, a 17-item questionnaire was administered to nine school personnel, including two principals and seven teachers. Responses from these sources suggest the following:

1. Collaboration between the private sector and schools increased "somewhat"; most teachers saw their attidude toward business as positive before the project began, and continue to do so.

2. Teachers saw "minor" changes at their schools as a result of the program, mostly in terms of their more precise teaching objectives and lesson plans, developed in the workshops.

3. Summer externships (especially), school-year workshops, and program-sponsored presentations were all seen to have been highly useful.

4. Little systematic change has yet filtered down to students as a result of the program, although some individual teachers use the new curriculum.

5. Business's main contributions to date are externships and curriculum development assistance, and teachers saw the need for more private sector contact.

6. The program was not very widely known among other teachers and school staff, although those who did know about it were supportive.

7. Program management was seen as "good" and to have improved dramatically since the prior year.

8. On a seven point scale–1, very weak to 7, very strong–the program was rated on average at 5.7 "in concept" and 5.3 "as implemented."

9. The program's biggest weaknesses were questionable credibility due to its newness and first year management problems, and workshop scheduling difficulties.

10. Its greatest strengths were curriculum writing and products, current management, coordination of schools and business, and exposure of teachers to the world of work.

Private-Sector Responses

Three Advisory Committee members from the private sector were also interviewed. Their responses suggest:

1. School staff involved in the project were enthusiastic, dedicated, and committed.

2. Current managers are good and maintain good contact with the private sector.

3. The Advisory Committee is good, with broad representation, particularly from the private sector, and it became a real working committee over the course of the year.

4. It is too early yet to judge the program's effect on school-business relations, and the program is too small and too much a part of a larger "mosiac" to have substantial short-term impact generally in the city.

5. The program's greatest weaknesses were seen as slow-moving time tables, too few staff, and questionable district support.

6. Its greatest strengths were described as its current management, the Advisory Committee, and the externship/curriculum development efforts that comprise the central theme of the project.

Summary

The Cleveland Partnership Program is unique among the Clark Foundation jobs programs in the fact that it does not yet attempt to directly affect students in any systematic way. While this will begin in 1987-88, for the past year there are no "hard" data on which to base a statistical assessment of the program's impact. This makes conclusions relatively subjective.

It is clear that a dramatic improvement occurred in the management of the program in 1986-87. Respones on current managers is almost universally positive. And these managers have set as a central goal obtaining support from the Cleveland public schools, so that the program can have the opportunity for substantial impact. Further, there seems to be evidence of progress toward this goal, in plans agreed to for next year.

Responses from school staff and private sector representatives suggest that the externships and curriculum development workshops have been useful and offer an opportunity for impact on students and improved school-business collaboration. However, the project is relatively small given its ambitions and still at a fledgling stage.

More time is needed for the current managers to build the program's credibility and work toward their well-targeted goals. The use of newly developed curriculum by teachers, and its impact on students, should proceed substantially in 1987-88, providing more concrete evidence of impact. Further, delivery of the promised support from the district can be monitored, providing feedback on achievement of that goal. The challenge is substantial, but the potential for impact is as well; evidence from the past year gives reason for a hopeful prognosis.

School To Work Action Program (SWAP)

Denver, Colorado

The SWAP program in Denver is jointly sponsored by the Denver public schools and the Colorado Alliance of Business (CAB), which receives and administers the Clark Foundation support grant. The program completed its third full operational year at both West and North high schools in Denver last June.

Although both program impact data and the opinions of those involved with SWAP present a mixed, inconclusive view of its success at West and North, CAB is moving ahead with replication of the program at as many as 13 other junior and senior high schools throughout the state beginning in the fall of 1987. CAB President Maxine Brandenburg believes that a great deal has been learned from the experience at West and North, and these lessons are being applied by CAB in providing support to the replication sites.

Despite a considerable decline in funding support from CAB during the 1987-88 school year--including the end of support for full-time on-site coordinators--both North and West are moving forward with the program. At West, two teachers already deeply involved in SWAP are administering the program through limited release time provided by the district. At North, the school is supporting a teacher nearly full time to manage the program with a new group of teachers.

Program Design

Through its three years, SWAP at each school has been primarily a 10th grade program. Most students participate in a fairly intensive 10th grade curriculum bordering on a school-within-a-school, but then have only limited participation in grades 11 and 12 (if, of course, they stay in school). The tenth grade consists of a cluster of classes which cover English, reading, math, and a career exploration class. Students are block programmed, thus facilitating field trips, guest speakers, and other events requiring more than a single period. In the 1986-87 school year, this basic model for the 10th grade was much more closely adhered to by West High School than by North High, which offered fewer classes and offered SWAP students world history rather than math.

Although 199 students were enrolled in the program at the two schools at some point during the school year, losses due to either program or school dropouts reduced this

number substantially by the end of the year. At West, about 60 10th grade students were in the program for the full year, while at North the figure was about 40. At West, 11th graders who completed the 10th grade SWAP curriculum are offered a second year of career exploration focusing more on job search skills. In the 1986-87 school year, 22 students at West were enrolled in the junior class in the fall. That number declined to 12 by the end of the year since 10 students enrolled in other programs. No such class was offered at North.

Only West High School had a group of seniors in 1986-87 since North began its program two years earlier with 9th graders. Plans to offer services to seniors at West who had taken the SWAP curriculum two years earlier did not materialize, though staff report having kept in touch with "a few" seniors. So for the most part, program impact for SWAP students versus comparison group students should result primarily from the intensive 10th grade program.

Both schools receive support from the Colorado Alliance of Business in enlisting the support of the private sector. CAB staff identify and train mentors in business and match mentors with SWAP students. CAB also helps arrange field trips and guest speakers. Most students who wanted mentors were assigned mentors this past year. In 1986-87, 21 North and 36 West SWAP students were matched with mentors. For many of the students interviewed from the two schools, the mentors program was a highlight of their 10th grade school experience.

CAB gave some assistance to students interested in summer jobs, though most of those placed found jobs on their own or through existing summer job programs like CAB's summer job hunt. About 25 North sophomores and 35 West sophomores reported that they had summer jobs in June. Direct job placement was not a priority for the program, which focused more on self-directed placement. Given their age, summer jobs were not necessarily appropriate for all students in SWAP.

Parental involvement came through daily phone calls from SWAP staff if a student was absent, parent participation on the SWAP Advisory Committee, and through parent nights at school. Faculty at West reported difficulty attracting significant numbers of parents to the parents night.

Student Profile

The two schools use different methods of recruiting students into SWAP. At West, the reading teacher identifies all 9th graders who are two or three years behind on the Iowa Reading Test. This list is then reviewed by counselors and teachers and narrowed according to staff perceptions about who could most profit from SWAP, and according to

prior attendance and grades. Students and parents are then contacted about possible participation.

The selection process at North has not been as clearly developed, other than serving 9th graders who clearly needed additional help to stay in school. In 1987-88, clearer criteria, including poor scores on reading tests, poor attendance, and poor grades are being used as selection criteria.

At both West and North there were nearly even numbers of males and females. Racial/ethnic breakdowns were also similar, as indicated in Table 4.1.

Table 4.1 SWAP Enrollment

School	Male	Female	White	Black	Hispanic	Total Enrollment
North	56%	44%	16%	7%	77%	61
West	47%	53%	18%	2%	80%	138
TOTAL	50%	50%	18%	4%	79%	199

Program Management

Although administration of the Clark Foundation grants is done by CAB, the program's administration has been primarily the school district's responsibility. But since the program coordinator has been a CAB employee for the past three years, CAB has had considerable influence in shaping SWAP. In addition to the on-site coordinator, CAB also has a project director who supervises the two coordinators, serves as liaison with the foundation, and performs a variety of tasks, including some not related to SWAP. The Denver schools provide all teaching and counseling staff for SWAP from its regular faculty. CAB recruits and trains business volunteers who serve as guest speakers and mentors.

To some extent at West, and to a great extent at North, the SWAP program has suffered from discontinuity in staff. CAB's on-site coordinator has changed each year at both schools. In many cases, the coordinators, who had been on CAB's payroll, were hired by the Denver public schools for non-SWAP program duties. Faculty turnover at North has been 100 percent and in 1987-88, all teachers in the program are new.

There is also an overall Advisory Committee for the two programs which meets four or five times a year. The Advisory Committee is made up of fairly even numbers of

business representatives, parents, and school district employees. CAB provides staffing to the Advisory Committee. It has also provided a great deal of instructional and staff development material for teachers and staff–both CAB-developed handbooks and secondary material. CAB is also a constant source of staff development workshops for participating staff at both schools.

The Colorado Alliance of Business's support position changed in 1987-88, as it no longer pays for on-site coordinators. As already mentioned, West is running the program without a coordinator; two teachers in the program are relieved of regular duty (for example, cafeteria and study hall) one period a day and use that time to help coordinate the program. At North, an experienced teacher has been assigned to coordinate the program, and she is spending about 80 percent of her time on SWAP. CAB continues to provide assistance to each school in locating mentors and arranging field trips. CAB staff also meet with the on-site coordinators every two weeks. It is unclear whether CAB will also formally assist the schools in direct job placement, though it will continue to place SWAP students in summer jobs through its long-standing summer job hunt.

CAB's focus this year is on program replication, and it has already enlisted several school districts interested in creating their own SWAP program or programs, including one more Denver school. Other sites include Alamosa, Lafayette, Grand Junction, Greeley, Pueblo, and Admas County. The replication sites and the two Denver SWAP programs are receiving on-going technical assistance from CAB, including a series of staff development workshops and the development of four detailed program replication guides. CAB has already raised more than $325,000 for the replication effort, including $145,000 from the governor's Job Training office. Other support includes $60,000 from the Clark Foundation, $30,000 from the Mountain Bell Foundation, other private grants, and both money and in-kind contributions from the state's community colleges and Department of Education.

The CAB Executive Director is aware of the lack of hard evidence showing SWAP's success to date:

> We realize that the SWAP program has not necessarily been an unqualified success to date, and that there have been problems over the three years especially at North High. But we've learned a great deal about how to launch such a program, and we are using those lessons at the replication sites. We are not, for example, providing a great deal of direct funding or staff to any site. The sites are paying for this themselves to show their commitment from the outset. And we've not had a problem attracting districts willing to make the financial commitment.
>
> Our focus has been on training and technical assistance. We provide materials and on-site assistance. We especially help the sites with short- and long-term planning.

> Our investment is considerable, but it is not in direct funding to the sites other than a discretionary fund which averages about $5,000 per site.
>
> Our purpose in all this is to get the public schools more committed to serving at risk students–to help reform the ways in which schools serve the large number of disadvantaged youth in need of help with transition to the labor market. We provide a great deal of guidance, curriculum materials, team-building support, and the like. And we think we've gotten off to an excellent start.

In the meantime, both North and West are being included in all of the technical assistance, and staff from the two schools attend the various CAB-sponsored workshops. North's principal, according to Brandenburg, is displaying real ownership for the program this year. He has provided the coordinator's position, and is block scheduling SWAP students next year for the first time, albeit at the end of the school day.

The Setting

Denver is a city of about 500,000 people. Its overall population is about 12 percent black and 19 percent Hispanic. Its estimated poverty rate in 1986 was 14.8 percent versus a national average of 14.0 percent. Its Standard Metropolitan Statistical Area (SMSA) unemployment rate in 1986 was 6.6 percent (versus a national average of 6.9 percent), and its estimated youth unemployment rate was 17.5 percent.

Denver's pattern of rapid growth has reversed in recent years due largely to a fairly stagnant economy. Office vacancy rates are among the highest in the nation following a period of optimistic construction. While blacks and Hispanics together are less than a third of the overall population, they compose more than half of the population of the Denver public schools, with 31 percent Hispanic and nearly 25 percent black.

Student Outcome Data

The "hardest" form of data by which to judge the effectiveness of the program is that related to measurable indicators of performance in school. These include dropouts, attendance, credits earned, courses failed, and standardized achievement test scores. The Comprehensive Tests of Basic Skills (CTBS) are administered in reading and math.

The tables below show the results from the analysis of data in these various categories. The "means" and "N"s (number of students contributing to each mean) are provided for both program and comparison group students, for their pre-program year and

the1986-87 school-year (only students with both pre and full 1986-87 data are included in the outcome analyses). In addition, the difference between the two groups is shown, as is the "net change" from pre to post. Difference scores are positive if the program groups outperform the comparison groups, and negative if the opposite is true. Scores have been grouped across grade levels in all cases. An asterisk indicates a statistically significant difference between program and comparison group students at the .05 level of probability.

Table 4.2 SWAP–School Dropouts

	Total Students	Dropouts	Percent
West High School			
Program	138	23	17%
Comparison	117	39	33%
Difference	---	---	16%*
North High School			
Program	61	10	16%
Comparison	49	11	23%
Difference	---	---	7%*

Table 4.3 SWAP–Attendance

	Pre-program	1986-87	Net Change
West High School			
Program	86.8 (62)	89.7 (62)	2.9
Comparison	85.8 (66)	88.0 (66)	2.2
Difference	1.0	1.7	.7
North High School			
Program	80.7 (22)	72.6 (22)	-8.1
Comparison	75.1 (34)	73.8 (34)	-1.3
Difference	5.6	-1.2	-6.8

Table 4.4 SWAP–Credits Earned (cumulative)

	Pre-program	1986-87	Net Change
West High School			
Program	51.3 (65)	158.7 (65)	107.4
Comparison	51.8 (67)	153.9 (67)	102.1
Difference	-.5	4.8	5.3
North High School			
Program	47.6 (22)	91.4 (22)	43.8
Comparison	40.8 (34)	82.6 (34)	41.8
Difference	6.8	8.8	2.0

Table 4.5 SWAP–Courses Failed†

	Pre-program	1986-87	Net Change
West High School			
Program	1.7 (65)	.8 (65)	-.9
Comparison	1.2 (68)	.6 (68)	-.6
Difference	.5	.2	-.3
North High School			
Program	1.3 (22)	2.7 (22)	1.4
Comparison	3.4 (34)	2.8 (34)	-.6
Difference	-2.1	-.1	2.0

† A negative difference indicates a superior program group performance on this variable.

Table 4.6 SWAP–Grade Point Average

	Pre-program	1986-87	Net Change
West High School			
Program	1.7 (65)	1.9 (65)	.2
Comparison	2.1 (68)	2.0 (68)	-.1
Difference	-.4	-.1	.3
North High School			
Program	1.6 (22)	1.5 (22)	-.1
Comparison	1.2 (34)	1.3 (34)	.1
Difference	.4	.2	-.2

Table 4.7 SWAP–Reading and Math Standardized Test Scores

	Pre-program	1986-87	Net Change
Reading			
West High School			
Program	NA	29.0 (61)	
Comparison	NA	31.3 (46)	
Difference		-2.3	
North High School			
Program	NA	29.8 (23)	
Comparison	NA	32.2 (26)	
Difference		-2.4	
Math			
West High School			
Program	NA	24.3 (59)	
Comparison	NA	27.7 (46)	
Difference		-3.4	
North High School			
Program	NA	22.3 (22)	
Comparison	NA	30.3 (26)	
Difference		-8.0	

These tables suggest a number of patterns, although the evidence is generally not at a statistically significant level.

1. The program has helped to reduce school dropouts. For both schools, there is a statistically significant difference between program and comparison group students in favor of program students.

2. On attendance, the program appears to have had a negative influence at North High School.

3. On credits earned, there are no substantial effects.

4. On "courses failed," program students do significantly worse at North High School than their comparison group counterparts.

5. On grades, there are no substantial effects.

6. The differences on standardized reading and math tests are all statistically insignificant, and the lack of pre-program data here makes these comparisons relatively meaningless.

Student Questionnaire Responses

A questionnaire was administered to students at the point they entered the program, in 10th grade, and again at the end of each school year. This form covered career-related experiences, plans and attitudes, as well as attitudes toward school, self, and the program. Responses from West High were grouped across three grade levels, while those from North High are from 10th grade only.

Means are presented below by topic and school. Figures in the columns under each school's name are percentages as students responded prior to their participation in the program (pre) and in the 1986-87 school year (post).

Table 4.8 SWAP–Student Questionnaire Responses

	West High		North High	
Career Related Experiences	Pre	Post	Pre	Post
Have learned about choosing a career, finding a job, etc.	32	75	37	59
Have heard business speakers, visited companies, had a mentor, etc.	18	69	32	63
Have held a job	21	31	24	57
Career Related Plans and Attitudes				
Have a specific plan for what to do upon graduation from high school	15	27	12	13
Have a long term career goal	33	42	76	73
View making career plans in high school as important	49	67	81	84
View gaining job skills while in high school as important	65	80	76	92
Attitudes Toward School and Self				
Like school during the past year	39	64	48	71
Like self after the past year	61	88	57	81
Attitudes Toward the Program				
See good career opportunities in their future	23	82	43	70
See good chance of finding a job upon graduation	55	89	71	77
Have positive feelings about program	60	74	57	73

Overall, program students at both schools are positive about the program and state that they have an increased career awareness following a year in the program. Students at both schools state that they feel they have good career opportunities in their future; the change, from 23 to 82, at West is particularly great.

School Personnel Responses

Five school staff members from each school completed the "School Staff Questionnaire," providing their perspectives on various aspects of the program. In both cases, four were teachers and the fifth was the on-site coordinator. The information they provided is presented by school below.

West High School

1. Collaboration with the business community increased as a result of the program, but there has been very little change in staff attitudes toward the business community.

2. Staff feels that major changes in the operation of the high school were required to accommodate the program, in terms of curriculum, facilities, and teacher's cooperative planning. CAB staff feels that this is a positive view, reinforcing their desire to refocus the schools' energies for at-risk youth.

3. The staff was satisfied with student selection and drop procedures.

4. In comparing what existed previously for the program's target group with what SWAP provides, staff felt that there were some general improvements in classroom facilities, career-related curriculum, instruction, counseling, equipment and books, and strong improvements in exposure to business representatives.

5. Field trips, mentorships, shadow days, and summer and school-year jobs are all seen as "highly to somewhat useful" student activities.

6. In rating changes stemming from the program, teachers feel the students' occupational knowledge, interest in school and learning, and self-esteem are "much better"; ratings for attendance and grades are "somewhat better."

7. Teachers rated other teachers and counselors in the school as "somewhat" to "very" supportive of the program, and administrators as "very" supportive.

8. Respondents rated overall program planning as "good."

9. On a seven-point scale, the mean rating of the program "in concept" was 6.0, and "as implemented" to date, 6.0.

North High School

1. Three respondents felt that collaboration with the business community "significantly" increased, one "somewhat," and one felt there was no change as a result of the program; staff reported little change in their attitudes toward the business community.

2. Staff felt that only minor, if any, changes in the operation of the high school were required to accommodate the program, in terms of curriculum, facilities, and teachers' cooperative planning.

3. Three of five responding staff members were dissatisfied with student selection and drop procedures, citing lack of selection criteria as the biggest difficulty.

4. In comparing what existed previously for the program's target group with what the academy provides, those who noticed changes in classroom facilities, career-related curriculum, instruction, counseling, equipment, and books felt they were positive.

5. Field trips, mentorships, shadow days, and summer and school-year jobs were all seen as "highly to somewhat useful" student activities.

6. In rating changes stemming from the program, teachers felt that students' occupational knowledge, interest in school and learning, self-esteem, attendance, and grades, were "somewhat better" or the same.

7. Teachers rated other teachers, counselors, and administrators in the school as "somewhat" to "very" supportive of the program.

8. Respondents rated the overall program planning as "good" to "excellent."

9. On a seven-point scale, the mean rating of the program "in concept" was 5.0, and "as implemented" to date, 4.8.

Four of 10 staff who completed the question regarding the program's greatest weakness felt that communication between CAB and school sites needed improvement, and that there was not an adequate understanding by CAB of "what really goes on in schools." In indicating the program's greatest strengths, half the respondents felt that the individual attention the program afforded students was its greatest strength.

Summary

The SWAP program at Denver's North and West high schools has a very mixed record. Overall, there has been more administrative support, greater continuity of staffing, and a more complete curriculum at West than at North.

Outcome data presented here are inconclusive. They reflect a more positive pattern at West than at North. Indeed, on some measures at North, comparison students outperformed program students. Overall, program students appear to be dropping out of school less than those in the comparison groups. But in no case are those who remain in school outperforming comparison students at a statistically significant level.

Despite turnover in staff and declining financial support from CAB, both programs are continuing in 1987-88. At North, the principal wants to give the program "one more chance" and has invested general support funds to provide a coordinator. At West, three veteran teachers in the program are staying with it, feeling strongly that the students in SWAP are getting a much better education than they would without the program. Two of them have volunteered to coordinate the program with very little extra support or compensation.

As already mentioned, the most important outcome of three years of experience with SWAP may be taking shape in the replication process now underway. Through CAB's very successful efforts at fundraising and school recruitment, several new SWAP programs have begun this year, and CAB's view is that the new programs will learn from the earlier experience at North and West.

The Step Ahead Program

Oakland, California

1986-87 was the second operational year for the Step Ahead Program. It expanded to four of six comprehensive high schools in Oakland. The curriculum also expanded to include units in grades 10-12, which began to be infused into English classes. The program career specialists at each school continued to provide the collapsed version of this training to 11th and 12th graders who expressed interest and were selected.

The program underwent major staff changes during the year. Alan Weisberg, director of the Oakland Alliance and founder of the Step Ahead program, left at the end of 1986 to return to private consulting. Step Ahead director, Deanna Link, left at the end of February. An employment manager who was hired in the fall to make job placements took on most of the program's administrative duties, and in March a part-time Oakland Alliance director, Dolores Ward, was appointed by the Oakland school district.

Training and placements continued throughout the year, through the efforts of career specialists in the four high schools and the employment manager, and placements continued over the summer. However, by the fall of1987 severe budget difficulties within the district had caused the director to be reassigned as an elementary school principal. Kaiser Aluminum, following a change in management, withdrew its donated office space, and the employment manager and secretary were moved to a school district office. As the fall semester began, three of the four career specialist positions had not been approved by the district, leaving just one in place.

Program Design

The Step Ahead program is designed around relatively brief career assessment and job search skill development coupled with placement assistance. It is based on an infusion model which builds much of this instruction into regular academic courses, namely survey (average student) English classes in grades 10-12. Since this was the first year of the attempt to infuse curriculum in this way, much of the year's efforts centered on modifying curriculum for this use and training English teachers. The curriculum is divided into three main units, each about 10 hours long:

- Grade 10–Exploring careers, assessing personal skills, and completing a job application
- Grade 11–Understanding the labor market and developing positive work attitudes
- Grade 12–Writing a resume, interviewing, and organizing a job search

In addition, career specialists in each school assist English teachers by making presentations in class, providing materials, and arranging for business speakers. And they continued to offer 20-hour Job Preparation Training Workshops to those students who showed interest or whose teachers or counselors recommended it. The workshops cover all three of the above-listed topics and provide an avenue for most of the actual training.

Job Placement

A central element of Step Ahead is job placement. A part of the training for those students who request placement is a mock interview conducted by a company employee, usually on a weekend, which is videotaped so that students can see themselves and receive constructive feedback. The employment manager also interviews these students to learn of their specific job interest, background, and qualifications.

Developing jobs in Oakland is a difficult task. The labor market is different from Boston or Palo Alto, for example, where there are many thriving high tech companies with appropriate positions for young people. Rather, Oakland's few big employers, such as Kaiser or Clorox, are either struggling or simply do not hire high school students.

Almost all program placements are in small companies, each of which typically hires only one student, so that each placement requires substantial work. These positions are generally clerical or retail and include the following: sales clerks, baggage handlers, delivery clerks, janitors, cashiers, tellers, waiters/waitresses, grounds keepers, data processors, typists, domestic helpers, and packagers.

Table 5.1 below shows the number of placements through the 1986-87 school year, for both those students trained this year and those trained the previous year. Figures are presented by high schoool.

Table 5.1 Step Ahead Student Job Placements, September 1986-August 1987

	Juniors	Seniors	Total
Castlemont	11	11	22
Fremont	26	22	48
McClymonds	15	15	30
Oakland Tech	15	33	48
Total	67	85	152

Four students were placed from Oakland High School as well, even though no career specialist was based there, bringing the total to 156. These figures compare favorably with the previous year, when 68 students were placed.

Student Profile

Because Oakland high school students are in general more at risk than those from many other places, particularly in the four program high schools, there is less attempt here than in other Clark Foundation projects to select from this general population an especially at-risk target group. The grade 10-12 curriculum is delivered to all survey (average) English class students.

Beyond this, the availability of the training is made known in a variety of ways to the larger student body through flyers and school announcements, academic teachers, counselors, and so on. Students are then largely self-selected through their expressions of interest. For those who show interest, the application process involves five steps:

1. Completion of a student application

2. Screening for minimum attendance (80%) and either GPA (2.0) or citizenship score

3. A personal interview, which is scored on several dimensions (grooming, attitude, motivation, communication)

4. Contacts with three references the student provides (counselors, teachers, other adults) to screen for these same characteristics

5. Checking with the school administrator responsible for behavioral problems to be sure the student will benefit from the training

An unwritten policy is not to admit GATE (high track) students who are college bound, but rather to limit participation to survey (middle track) students who plan to work part-time or full-time upon graduation.

A total of 270 students were trained in the Step Ahead program during the 1986-87 school-year, 111 juniors and 159 seniors. Of these, 84 percent were black, 9 percent Asian, 6 percent Hispanic, and 1 percent American Indian; 69 percent were female, 31 percent male.

Program Management

The Oakland Alliance, through its fiscal agent, the Marcus Foster Educational Institute, is the Clark Foundation grant recipient in Oakland. This is an independent agency, which had offices in downtown Oakland (provided by Kaiser) during 1986-87 and a director, whose salary was paid jointly by UC Berkeley and the Oakland public schools. However, upon the director's departure in December 1986, this position was filled on a part-time basis by an Oakland school district administrator, Dolores Ward.

The Clark Foundation grant covered the cost of a Step Ahead director. It also covered an employment manager, who was hired in the fall to develop jobs, and assumed most administrative duties for the program in March, upon the departure of the program's director. The 1986-87 grant covered in the cost of one-and-a-half of the four high school based career specialists (down from two-and-a-half the previous year), with the district paying for the other two-and-a-half. It also covered a secretary, data collection assistance, travel, and other incidental costs.

While there is an Advisory Board for the Oakland Alliance as an agency, with high-level, private-sector representation, the Step Ahead program does not have a separate body as such. There are two private-sector individuals actively involved, a Chamber of Commerce Education Committee chair and a Kaiser employee who is the Vice Mayor of Oakland. Beyond this, there are a number of individuals actively involved in various

program activities, such as conducting mock interviews or speaking to students, and a growing body of companies that have employed students.

With the change in staffing and office location in the fall of 1987, the Oakland Alliance has been largely subsumed by the Oakland school district, which was the long-term hope for institutionalization of its programs. The current plan is for Step Ahead to maintain a separate office within the district for another year, with an employment manager and secretary. It is unclear whether the career specialist positions eliminated at the beginning of the fall semester will be reinstated, although efforts were underway at the time of this writing toward that end.

The Setting

Although Oakland is in some ways a growing and prosperous city, it continues to suffer by comparison with its wealthy, high-profile neighbor across the bay, San Francisco. The rapid growth and general affluence of the entire Bay Area, with a population of nearly six million and an average income second only to Washington, D.C., also contributes to Oakland's image problems. It's population is 47 percent black and 10 percent Hispanic, with a rapidly growing Asian population not currently accurately measured, but estimated at about 12 percent. Its estimated poverty rate in 1986 was 19.9 percent, compared with a national average of 14 percent. Its Standard Metropolitan Statistical Area (SMSA) overall unemployment rate in 1986 was 5.8 percent (compared with a national average of 6.9 percent), and its estimated youth unemployment rate was 15.4 percent.

The Oakland public schools also have a troubled image, with several negative reports issued in the last few years, a superintendency change last year, and serious budget problems. One bright spot is a substantial rise in standardized achievement test scores during the last four years. Table 5.2 below contrasts the four Step Ahead high schools with the high school district generally on race/ethnicity, income, and test scores.

Table 5.2 Step Ahead and Oakland Schools Compared

	Step Ahead	District
Race/Ethnic Makeup		
Asian	8%	15%
Black	80%	62%
Hispanic	9%	10%
White	3%	10%
Other	-	3%
From AFDC Eligible Families	67%	43%
CTBS Test Score Percentiles		
Reading	28%	35%
Language	31%	39%
Mathematics	43%	53%

Student Outcome Data

The Step Ahead program includes no academic components in its design, making academic variables inappropriate as indicators of program effect. Therefore, unlike most other Clark Foundation programs, data were not collected here on attendance, credits earned, grade point average, and so on. The one outcome measure it seemed the program might influence was retention, and while there was no comparison group here with which to compare this figure, data have been obtained on Step Ahead student dropouts, and are compared below to schoolwide dropouts in the four program high schools.

Table 5.3 Step Ahead–School Dropouts

	Step Ahead	Schoolwide
	(1986-87)	(1985-86)*
Castlemont High School	1.8%	7.6%
Fremont High School	0%	10.1%
McClymonds High School	1.4%	5.5%
Oakland Tech High School	1.2%	3.5%

* Schoolwide dropout figures are not available until the fall for the 1986-87 school year. This comparison may be biased by the fact that the Step Ahead students were all juniors and seniors, while the schoolwide figures are across four years of high school, although the consistent and generally wide disparity between Step Ahead and schoolwide figures suggests some program impact on this variable.

Student Questionnaire Responses

Students that participated in the training completed a questionnaire before they began, and, again, after the training was finished, generally several weeks later. The two forms are in many ways parallel, allowing assessments of changes during the training period. The questionnaires included items relating to career-related experiences, plans, and attitudes, as well as attitudes toward the program and self. A total of 216 students completed both versions of the questionnaire this year. Results are summarized below.

Table 5.4 Step Ahead–Student Questionnaire Responses

	Pre-training	Post-training
Career-Related Experiences		
Have studied how to choose a career, behave on a job	60%	78%
Have practiced finding a job, had career counseling	47%	66%
Career-Related Plans and Attitudes		
Have a specific plan for what to do upon graduation	30%	30%
Have a long-term career goal	73%	82%
View making career plans in high school as important	99%	100%
Attitudes Toward Program and Self		
Liked self after the past year	79%	89%
See good chance of finding a job upon graduation	59%	84%
Have positive feelings toward the program	92%	95%

These responses suggest that there has been some expansion of students' career-related experiences and improvements in their job expectations upon graduation.

School Personnel Responses

Twenty-two staff members from the four program schools completed a "School Staff Questionnaire," providing their perspectives on various aspects of the program. Participating staff included six staff from Castlemont High School, seven from Fremont, six from Oakland Tech, and three from McClymonds. Responses were consistent from site to site and are reported here across the four schools. Responses suggest the following:

1. Collaboration with the business community increased as a result of the program, and attitudes toward this community are uniformly positive.

2. Changes in the operation of the high schools have been minor and have been largely associated with curriculum changes.

3. Teachers were satisfied with the program's student selection procedures; about half don't know if there are drop procedures.

4. In comparing what existed previously for the program's target group with what the program provides, most school staff saw "some" improvement in facilities, equipment, and books, and "much" improvement in students' exposure to business representatives, and career-related curriculum, instruction, and counseling.

5. Field trips, mentorships, and summer and school-year jobs were all seen as "highly useful" student activities.

6. In rating changes stemming from the program, teachers saw "much" improvement in students' occupational knowledge and "some" improvement in all the following: students' interest in school and learning, self-esteem, attendance, grades, and discipline.

7. Teachers rated other teachers, counselors, and administrators in the school as "very" supportive of the program, particularly the latter two.

8. Program planning was rated as "excellent."

9. On a seven-point scale, the mean rating of the program "in concept" was 6.4, and "as implemented" to date, 5.9.

10. The program's greatest strengths were seen to be the impact on students' attendance and self-esteem, their exposure to businesses, and the quality of the career specialists.

11. Its greatest weaknesses were described as the need for more resources (funding, staff, supplies, planning time), stronger business support (career day, job placements), and stronger district support.

Summary

This is a difficult program to evaluate, as it lacks academic components and thereby precise statistical measures on which to rely. Modeled on the Boston Compact, it also offers only limited services to its students, essentially a brief period of employability skills training and job placement assistance. For the one school outcome measure on which it might conceivably be judged, school retention, it has done well.

The program also operates in a difficult labor market. Given this fact, it performed well in placing students. A total of 156 students were placed during the school year and over the summer. In addition, students reported expanded career-related experiences as a result of the program, as well as higher post-graduate job expectations.

Responses from program staff are consistently positive across the four sites, particularly related to the quality of program staff and the program's impact on students' attitudes and career-related instruction and experience. Given the number of staff respondents here (22) and the fact that the program operated in four rather different schools, this consistency of positive feedback is heartening.

The Oakland Alliance and Step Ahead programs were at fledgling stages of development in the fall of 1986. Given this fact, staff changes during the 1986-87 school year and further changes in the fall of 1987 could not help but have an impact on this development. As of this writing there is neither an Oakland Alliance director (who is not fully committed to another position) nor Step Ahead director, and there is a career specialist in just one school. Given the district's financial problems and less than clear commitment to the program, the prognosis for the future must be viewed as uncertain.

Business and Finance Academy

Pittsburgh, Pennsylvania

This was the third operational year of the Business and Finance Academy at Westinghouse High School in Pittsburgh. The program now includes students in grades 10-12. In June 1987 the program saw its first academy class graduate. Not only did the Business and Finance Academy continue to develop, but the high school laid plans this year to establish two new academies, one in science and math and one in high-tech electronics. Parent involvement increased substantially this year, largely through the efforts of a new parent coordinator. Private sector involvement continued, including the establishment of a Mellon Bank mailing room facility in the basement of Westinghouse High School. Probably the most serious weakness was a decline in job placements.

Program Design

The program's core is a series of articulated courses across grades 10-12. Students in the academy are block rostered into these courses, so that they have common curricula and teachers, and develop friends and identity with the program. The program courses included:

- Grade 10–English, World Cultures, and Business & Finance I
- Grade 11–English, U.S. History, and Business & Finance II
- Grade 12–English and Business & Finance III

Students take other courses, such as science and math, as part of their regular high school offerings. They are placed according to their skill levels.

While all academy courses meet full high school requirements for credit and graduation, the curriculum is modified to respond to the business and finance theme where possible. For example, English classes use business correspondence and practices for practice in writing. History courses include segments on the economies of earlier eras, and research papers require students to write using computers. The 12th grade Business & Finance course, new this year, includes segments on customer service, bookkeeping and filing, proofing, and "tellering," as well as practice on computers and examination of current events where relevant.

A number of "enrichment" activities supplement course work. While business speakers and field trips to companies were used during the past two years, they were not this year. A mentor program became fully operational this year, with 39 successful black businessmen and women serving as career-related big brothers and sisters to program seniors. A job fair was also organized in the spring, with the aid of the high school job placement coordinator, to help bring employers together with program students seeking summer jobs or full-time placements upon graduation.

A series of activities is also provided to increase students' motivation. Program trips were taken to a ski resort, amusement park, ballet, museum, and roller skating rink. Admission to the skating party was "a parent." The parent coordinator's efforts to involve parents also led to a group of 35-40 parents meeting monthly, plus the parents' support for various program activities, including fund raising. A set of financial incentives was implemented this year which entitled students with perfect attendance to earn $10 each quarter, and those who made the honor roll, $15. The sum of these rewards, which can be as high as $300, is held for students to receive upon graduation and can constitute the beginning of a college fund.

The job placement program continued, although was not as successful as a year ago, when 23 students were placed in summer jobs. This year, three of the 37 graduating seniors were placed in jobs upon graduation, two in banks and one in an accounting agency. Nine juniors were placed in summer jobs, most in banks.

Student Profile

A clear and rather complex system for selecting students into this program has been developed. It begins with an examination of 9th grade files, to identify students with low grades but reasonably high standardized achievement test scores (minimum 30th percentile), suggesting unfulfilled potential. Information is then sought from the following:

- Ninth grade counselor–To rank the academic performance of students, eliminate high achievers, and identify those with low attendance and course failures as potential candidates.

- School nurse–To identify students with low motivation and esteem, family problems, and pregnancies or children.

- Vice Principals for Discipline–To obtain further information about levels of motivation and family problems and eliminate students who have disruptive personalities or the likelihood to "act out" their hostilities.

- School social worker–To obtain further information about low self-esteem and family problems.

- Parents–As a final step, information regarding the program is given to parents of potential candidates, and those who wish their child to be in the program must sign a permission and support form.

There were 113 students in the program this year, 51 percent females and 49 percent males. All participants are black, as are all Westinghouse High School students. By grade level, the participants numbered as follows:

- Grade 10–39
- Grade 11–37
- Grade 12–37

Program Management

The Business and Finance Academy is managed jointly by staff at Westinghouse High School and the Urban League of Pittsburgh. The Clark Foundation grant goes to the Urban League, which in 1986-87 provided a one-third time director, the Urban League's director of education; one-half of the lead teacher's time, who teaches the Business & Finance classes; a parent coordinator; secretarial support; and evaluation data collection help. The high school provides administrative support; other teachers, including an English teacher at grades 10-12, a history teacher in grades 10-11, and an aide; classroom space; counseling; and most learning materials.

An Executive Committee oversees the program, and is responsible for all policy matters. It is chaired by the Urban League executive director and includes representatives from the Pittsburgh public schools, Allegheny Conference on Community Development, and the six participating banks: Mellon, Pittsburgh National, Equibank, Dollar Savings, First Federal, and Union National. A Steering Committee, chaired by the program's director, has a similar composition but deals with operations.

The program is well regarded in the school and community. In November *The New Pittsburgh Courier* ran a positive article on the program entitled "Renaissance in Education." A local television "evening magazine" show filmed a segment on the program this winter, focusing on students and their accomplishments, especially one academy girl who is the senior class president and is headed for college next year. While teachers in the school were reluctant to teach in the program at first, more than enough are now volunteering to participate. The school's co-principals speak positively about the program and feel that many of its students are showing more direction and commitment to school.

Two more academies are planned at the school, one in science and math and one in high tech electronics.

The Setting

Westinghouse High School is unique in the city of Pittsburgh, so much a part of the black community it was not even included in the city's desegration plan. It serves only black students and is increasingly being viewed positively in the city.

Table 6.1 Westinghouse High School Compared to the District

	District	Westinghouse
CAT Test Percentile		
Reading	53	36
Language	69	59
Race/Ethnicity		
Black	52	100
White/Other	48	-
Percent of Students on Free/Reduced Lunches	53	40

The city of Pittsburgh was deemed in a Rand McNally survey a year ago to be the most desirable city in the country in which to live. Its population is 24 percent black, 1 percent Hispanic, and 75 percent white/other. Its estimated poverty rate in 1986 was 17.8 percent, versus a national average of 14.0. Its Standard Metropolitan Statistical Area (SMSA) unemployment rate in 1986 was 8.0 percent (versus a national average of 6.9 percent), and it's estimated youth unemployment rate was 21.2 percent.

Student Outcome Data

The "hardest" form of data by which to judge the effectiveness of the program is that related to measurable indicators of performance in school. These include dropouts, attendance, credits earned, courses failed, and standardized achievement test scores. In Pittsburgh, GPAs are not available, as the district does not compute them for most students. Standardized tests are administered in reading and language (the California Achievement Test).

The tables below display results from an analysis of data in these various categories. The "means" and "N"s (number of students contributing to each mean) are provided for both program and comparison group students, for their pre-program year, and for the 1986-87 school year. In addition, the difference between the two groups is shown, as is the "net change" from pre to post. Difference scores are positive if program groups outperform comparison groups, and negative if the opposite is true. Scores have been grouped across grade levels. Asterisks indicate statistical significance at the .05 level of probability.

Table 6.2 Pittsburgh–1986-87 School Dropouts

	Total Students	Dropouts	Percent
Program	113	5	4%
Comparison	111	33	30%
Difference	-	-	26%*

Table 6.3 Pittsburgh–Attendance

	Pre-program	1986-87	Net Change
Program	88.8 (104)	91.8 (104)	+3.0
Comparison	95.4 (43)	90.5 (43)	-4.9
Difference	-6.6	+1.3	+7.9*

Table 6.4 Pittsburgh–Credits Earned

	Pre-program	1986-87	Net Change
Program	17.3 (104)	15.1 (104)	-2.2
Comparison	17.6 (43)	14.3 (43)	-3.3
Difference	-.3	+0.8	+1.1

Table 6.5 Pittsburgh–Courses Failed†

	Pre-program	1986-87	Net Change
Program	.50 (104)	1.00 (104)	.50
Comparison	.52 (42)	1.17 (42)	.65
Difference	-.02	-.17	-.15

† A negative difference indicates a superior program group performance on this variable.

Table 6.6 Pittsburgh–Reading and Language Test Scores

	Pre-program	1986-87	Net Change
Reading			
Program	52.5 (94)	46.6 (94)	-5.9
Comparison	54.6 (47)	53.0 (47)	-1.6
Difference	-2.1	-6.4	-4.3
Language			
Program	65.0 (94)	64.1 (94)	-.9
Comparison	65.4 (46)	62.7 (46)	-2.7
Difference	-0.4	+1.4	+1.8

These data show a number of things:

- Retention is significantly better among academy students than their matched comparison group counterparts.
- Attendance is signficantly better among academy students.
- Credits earned, courses failed, and reading and language test scores show no statistically significant differences between academy and comparison groups, although three of these differences are in a direction favoring academy students.

Student Questionnaire Responses

A questionnaire was administered to students at the point they entered the program, at the beginning of 10th grade, and again at the end of each school year. This form covered career-related experiences, plans and attitudes, as well as attitudes toward school, self, and the program. Responses have been grouped across the three grade levels of students. Pre-post means are presented below, by topic. All figures are percents.

Table 6.7 Pittsburgh Student Questionnaire Responses

	Pre-program	1986-87
Career-Related Experiences		
Have learned about choosing a career, finding a job, etc.	37	68
Have heard business speakers, visited companies, had a mentor, etc.	26	47
Have held a job	35	60
Career-Related Plans and Attitudes		
Have a specific plan for what to upon graduation from high school	37	59
Have a long-term career goal	49	67
View making career plans in high school as important	97	97
View gaining job skills while in high school as important	99	98
Attitudes Toward School and Self		
Liked school during the past year	64	72
Liked self after the past year	85	84
Attitudes Toward the Program		
See good career opportunities in their future	50	79
See good chance of finding a job upon graduation	67	75
Have positive feelings about the program	79	79

The direction of change for most of these variables is positive, and students in particular are gaining in terms of their career-related experiences, plans, and sense of future opportunities.

School Personnel

Four school staff completed the "School Staff Questionnaire," providing their perspectives on various program aspects. Three of these were teachers; the fourth was the parent coordinator. Their responses suggests the following:

1. Attitudes toward the the business community, and collaboration with this community, improved as a result of the program.

2. Significant changes in the operation of the high school have taken place to accommodate the program, in terms of curriculum and scheduling.

3. Teachers were satisfied with student selection procedures, but felt that problem students need to be dropped sooner.

4. In assessing various aspects of the program, teachers rated poorly the books and learning materials, moderately the facilities, and highly the equipment, exposure to business respresentatives, and career-related curriculum, instruction, and counseling.

5. Field trips, mentorships, and jobs were all highly rated student activities.

6. In rating changes stemming from the program, teachers saw clear improvement in students' occupational knowledge, interest in school and learning, self-esteem, and discipline, and some improvement in attendance and grades.

7. Support from school teachers, counselors, and administrators was rated highly.

8. Program planning was rated as "good."

9. On a seven point scale, the mean rating of the program "in concept" was a 6.5, and "as implemented" to date, 5.0.

10. The program's greatest strengths were seen to be direct employer contact and teacher support for students; its greatest weaknesses were keeping unresponsive students and insufficient numbers of student jobs.

Summary

On balance the information here provides a positive picture, with a few areas for improvement. To summarize:

1. The program is now soldily established at the school, well-regarded by staff and students, and is a model for wider use. The relationship between the high school and Urban League is good, particularly with the addition of the parent coordinator this year, who provides a regular Urban League presence at the school. There is some feeling that the program needs to take a firmer attitude with nonresponsive students, and there needs to be an improvement in job placements, which fell off from last year.

2. Student outcome data show clear academy effects on retention and attendance, two reflectors of improved motivation. Program students do not show statistically significant differences from the comparison groups on other outcome variables, although in three of four cases the direction of the difference favors academy students.

3. Student questionnaire responses show positive movement in most areas, particularly related to students' career-related experiences, plans, and sense of future opportunities.

4. School staff rate most aspects of the program highly, including school support. They would like to see improvements in curricular materials, a tougher approach with nonresponsive students, and a better job of supplying the jobs promised to students.

This program operates in an all-black high school, in a city that is one-fourth minority and has a relatively weak economy with a higher-than-average poverty and unemployment rate. Within the high school, truly at-risk students are selected for the program. In short, the program has its work cut out for it. Yet on balance it is working. While strict academic measures such as credits and grades do not reflect this, motivational indicators do, including retention, attendance, and both student and staff feedback. There are areas for improvement, but the program has a good foundation from which to build. The prognosis is positive.

Financial Services Technology Academy

Portland, Oregon

This was the third operational year of the Financial Services Technology Academy at Jefferson High School in Portland. The program now includes students in grades 10-12, and in June its first academy class graduated. The program continued to develop at the school, with six teachers now involved, curriculum in place for all three years, and an established system of student rewards. Private-sector involvement grew this year as well, with an expanding Advisory Committee and strong mentor and job placement components.

With the Clark Foundation support nearing an end, the school district agreed to assume next year's school-related program costs, including a lead teacher/program director released from teaching duties; all other teachers, including an extra planning period and aide; additional equipment; and staff and curriculum development funds. Planning was under way for two additional academies in the district, at two other high schools.

Program Design

The core of the program at Jefferson High School is a series of articulated courses across grades 10-12, into which students are block rostered, so that they have common curricula and teachers, develop an identity with the program, and feel at home in the school. The program courses include:

- Grade 10–Business, English, and math
- Grade 11–Business, English, and personal finance and economics
- Grade 12–Business

All courses count fully toward graduation requirements. Other subjects, such as science and social studies, are taken in a "mainstream" fashion, in regular high school classes.

Attempts are made to coordinate the curriculum among courses. For example, a business class unit on the stock market would include information about the market's functions, related vocabulary and writing in English class, and practice in investing in stocks and computing changes in stock values in math class. Practice on business calculators and computers is common across grade levels, especially keyboarding and word processing.

A number of "enrichment" activities supplement the course work. A regular pattern of business speakers (three or four per month) make presentations, and students attend approximately one field trip per quarter. All juniors have mentors, career-related big brothers and sisters, from supporting companies. About half of these have carried over their contacts with last year's juniors into their senior year. An elaborate system of rewards is in place for perfect attendance, most improved GPA, 3.0 or above, 2.5 or above, and highest GPA. Rewards include sweatshirts, certificates, free lunches, and the like. Counselors from the Urban League office work with students, spending some time at the high school and some at the Urban League office. There is parental contact initially each fall at the point students decide to enroll in the program and generally when students have problems.

The job placement program grew this year. Whereas eight students were placed last summer, 24 were placed this summer, including all seniors and juniors who were qualified and recommended for jobs. Almost all of these jobs were in companies related to the financial services focus of the training, eight at First Interstate Bank, six at U.S. Bancorp, four at Standard Insurance, and so on. A number of sophomores were placed in Private Industry Council jobs in nonfinancial services companies to give them some preliminary job experience.

Student Profile

A well defined and thorough process for selecting students for this program has evolved. The goal is to find students who have potential that is being unmet, primarily because of insufficient motivation. The process includes the following steps:

1. A lead teacher sends a memo to 9th grade teachers and counselors describing the type of student being sought (low self-image, poor attendance, reasonably good competency test scores and math ability) and collects nominations.

2. Records are reviewed of nominated students to screen out serious discipline problems and inappropriate test scores (either direction).

3. Remaining nominees are invited to an informational meeting, and the program is described, partly by current participants.

4. Parents of interested nominees are invited to an informational meeting.

5. Nominees still interested are given individual 15-minute interviews by a lead teacher.

6. Nominees still interested complete an application form which must be signed by a parent.

7. Final selections are made by interviewers, and letters are sent home notifying students of acceptance or rejection (appeals are allowed).

There were 73 students in the program at the end of this year. By grade level, 35 were sophomores, 28 juniors, and 10 seniors. By sex, 52 percent were female and 48 percent male. And by race/ethnicity, 60 percent were black, 38 percent white, and 2 percent Hispanic.

Program Management

Three agencies are involved in managing the Portland Financial Services Technology Academy. The Clark Foundation grant is directed to the Urban League of Portland, which in 1986-87 provided a program director, part-time counseling for students, 60 percent of the lead teacher's time, and data collection assistance. The Urban League in turn subcontracts with the Business-Youth Exchange (BYE), an arm of the Portland Chamber of Commerce, for much of the business contact and support.

Portland public schools contribute in many ways: central administrative support, via a vice principal assigned to the program; 40 percent of the lead teacher's time; the remaining five teachers (four of whom are part-time), each of whom receives an extra preparation period; classrooms; and miscellaneous equipment, software, textbooks, and learning materials.

The program is supported by an active Advisory Board. This body has 15 members, six each nominated by the Urban League and BYE, and three from the Portland public schools. It was chaired this year by Chuck Long from U.S. Bancorp, who has been active in supporting the program from the start. Next year it will be chaired by Kathy Edwards from First Interstate Bank, another bank that has shown consistent strong support. The board meets monthly, and this year it established several task forces to focus on areas of program need. One of these dealt with the issue of institutionalization and how to permanently support the program.

The program is well regarded in the school, district, and city. The principal of Jefferson High School feels that it has been effective in holding at-risk students and, although it is relatively expensive, sees it as a model for wider use. The district career and vocational education staff concur. The superintendent, who is particularly interested in dropout prevention and career education, is also very supportive and was instrumental in providing the program's financial support for next year.

In fact, initial planning is under way to establish academies at two other high schools, should funding be available. And a leader's roundtable in the city, which includes the mayor, superintendent, and business leaders, seems interested and may seek city or state funds to support replications.

The Setting

Jefferson is one of 10 high schools in Portland. It is located on the east side of the Willamette River, away from most leading businesses, and in the midst of a relatively low-income community. It houses a 55 percent minority population, primarily black, which is the highest in the city. The district conducts no districtwide standardized testing, but Table 7.1 reveals recent district and school figures on race and income.

Table 7.1 Jefferson High School Compared to the District

	District	Jefferson
Race/Ethnicity		
Asian/Pacific Islander	9%	7%
Black	14%	43%
Hispanic	3%	3%
White	72%	45%
Other	2%	2%
Percent of Students On Free/Reduced Lunches	20%	38%
Academy	NA	60%

The city of Portland's population is 8 percent black, 2 percent Hispanic, and 90 percent white/other. Its estimated poverty rate in 1986 was 14 percent, exactly the national average. Its Standard Metropolitan Statistical Area (SMSA) overall unemployment rate in 1986 was 7.2 percent (compared with a national average of 6.9 percent), and its estimated youth unemployment rate was 19.1 percent.

Student Outcome Data

The "hardest" form of data by which to judge the effectiveness of the program is that related to measurable indicators of performance in school. These include retention, attendance, credits earned, courses failed, and grade point average (GPA). Portland administers no standardized achievement tests on a districtwide basis, so this type of data is not available.

The tables below display results from an analysis of data in these categories. The means and number of students contributing to each mean (N's) are provided for both program and comparison group students, for their pre-program year and the 1986-87 school year. In addition, the difference between the two groups is shown, as is the "net change" from pre to post.

Difference scores are positive if the program groups outperform the comparison groups, and negative if the opposite is true. Statistically significant differences are indicated with an asterisk. All three years of students are grouped together to simplify the presentation.

Table 7.2 Portland–School Dropouts

	Total Students	Dropouts	Percent
Program	85	2	2%
Comparison	101	12	12%
Difference	-	-	10%*

Table 7.3 Portland–Attendance

	Pre-program	1986-87	Net Change
Program	94.5 (72)	89.4 (72)	-5.1
Comparison	93.1 (68)	87.9 (68)	-5.2
Difference	1.4	1.5	.1

Table 7.4 Portland–Credits Earned

	Pre-program	1986-87	Net Change
Program	5.7 (71)	7.0 (71)	1.3
Comparison	5.4 (68)	6.3 (68)	.9
Difference	.3	.7	.4

Table 7.5 Portland–Courses Failed†

	Pre-program	1986-87	Net Change
Program	1.1 (71)	.9 (71)	-.2
Comparison	1.1 (70)	2.0 (70)	.9
Difference	0	-1.1	-1.1*

†A negative difference indicates a superior program group performance on this variable.

Table 7.6 Portland–Grade Point Average

	Pre-program	1986-87	Net Change
Program	1.9 (72)	1.9 (72)	0
Comparison	1.8 (68)	1.4 (68)	-.4
Difference	.1	.5	.4*

These tables reveal several patterns:

1. A far lower dropout rate for academy students than their matched comparison group counterparts.

2. Declining attendance through high school for both groups, at about the same rate.

3. Improving credits for both groups through high school, at about the same rate.

4. For both courses failed and GPA, a pattern of essential stability through high school for academy students, while their comparison group counterparts are in substantial decline, so that on both variables the program students do statistically significantly better across high school.

To summarize, on three of five variables (retention, courses failed, and grade point average) academy students are statistically significantly superior to their comparison group counterparts; on two variables (attendance and credits earned) they are about equal. The program seems to hold students in school and stems a decline in performance that occurs without it.

Student Questionnaire Responses

A questionnaire was administered to students at the point they entered the program, at the beginning of 10th grade, and again at the end of each school year. This form covered career-related experiences, plans and attitudes, as well as attitudes toward school, self, and the program. Responses have been grouped across the three grade levels. Pre-post means are presented in Table 7.7 by topic. All figures are percents.

Table 7.7 Portland–Student Questionnaire Responses

	Pre-program	1986-87
Career-Related Experiences		
Have learned about choosing a career, finding a job, etc.	44	80
Have heard business speakers, visited companies, had a mentor, etc.	31	68
Have held a job	63	78
Career-Related Plans and Attitudes		
Have a specific plan for what to do upon graduation from high school	31	53
Have a long-term career goal	55	60
View making career plans in high school as important	99	99
View gaining job skills while in high school as important	100	100
Attitudes Toward School and Self		
Liked school during the past year	43	59
Liked self after the past year	55	74
Attitudes Toward the Program		
See good career opportunities in their future	47	80
See good chance of finding a job upon graduation	65	85
Have positive feelings about the program	72	92

School Personnel Responses

Seven Jefferson High School staff completed the "School Staff Questionnaire," providing their perspectives on various program aspects. This included the program's six teachers and the vice principal who is administratively responsible for the program. Their responses suggest the following:

1. Collaboration with the business community increased as a result of the program, although attitudes toward this community are mixed.

2. Changes in the operation of the high school have taken place to accommodate the program, in terms of curriculum, facilities, and teachers' cooperative planning.

3. Teachers were satisfied with student selection procedures but have mixed feelings about drop procedures; some felt that problem students should be dropped sooner.

4. In comparing what existed previously for the program's target group with what the academy provides, school staff saw improvements in facilities, equipment, books, exposure to business representatives, and career-related curriculum, instruction, and counseling.

5. Field trips, mentorships, shadow days, and summer and school-year jobs were all seen as "highly useful" student activities.

6. In rating changes stemming from the program, teachers saw clear improvements in the following student characteristics: occupational knowledge, interest in school and learning, self-esteem, attendance, and grades.

7. Teachers rated other teachers in the school as "very" supportive of the program, counselors as between "very" and "somewhat" supportive, and administrators as "somewhat" supportive.

8. Program planning was rated as "good."

9. On a seven-point scale, the mean rating of the program "in concept" was 6.4, and "as implemented" to date, 5.1.

10. The program's greatest strengths were seen to be strong support from the business community and the positive effect on students; its greatest weaknesses were lack of sufficient counseling and poor cooperation among the agencies coordinating the program.

Summary

There appear to be many areas of strength in this program, and a few weaknesses. To summarize:

1. Management of the program is generally strong, and both school and business support is good. However, cooperation among the Urban League, Business-Youth Exchange, and school staff remains less than perfect. The declining role of the Urban League, with diminishing Clark Foundation support, and the increasing role of the school district as it picks up most program costs, in some ways lessens this problem, but it also raises the possibility of reduced sensitivities to the minority students and culture the program is in part directed toward.

2. Student outcome data reveal good performance on retention, courses failed, and grades, and no clear program and comparison group differences on attendance and credits earned.

3. Student questionnaire responses suggest clear program impact on career-related experiences and job opportunities and moderate impact on career-related plans and attitudes and attitudes toward school and self.

4. School staff see many types of student impact due to the program, feel it is generally well run, and rate highly the business support. They see room for improvement in coordination of supporting agencies and in counseling.

This is a good report card. The program is well established and run, is having generally positive effects on students, and seems poised for continuing success and, perhaps, expansion.

Public-Private Partnership Program

Washington, D.C.

1986-87 was the sixth operational year of Washington's Public-Private Partnership Program and the fourth year of Clark Foundation funding. It was also the fifth year in which two high schools, Dunbar and Woodson, had students enrolled in Public-Private Partnership (PPP) programs. While this report will focus on these two programs, there are five other high schools with parallel programs elsewhere in the district. Two of these are five years old, one is three years old, and the other two just one year old. The program at Dunbar focuses on pre-engineering, the one at Woodson on business and finance. Programs at other high schools focus on health care, travel and tourism, communications, international studies, and culinary arts.

The Public Private Partnership Program began primarily as a staff development effort. District teachers were provided summer externships in Washington companies for the purpose of gaining knowledge they could convert into high school curriculum directed at preparing students for careers. This led to what are now substantive programs in the above-mentioned fields ranging across three or four years of high school. These programs are growing in size and scope, and included approximately 700 students across seven schools during the 1986-87 school year.

Program Design

The PPP programs are structured as schools-within-schools. They require students to enter at grades 9-10 and continue in the program through graduation. Participants take all courses required for graduation and a series of articulated courses focused on their program's field of training. For example, the Dunbar pre-engineering students take a series of nine courses ranging from engineering drawing and aerospace science to computer concepts and creative design. The Woodson business and finance students take 12 courses ranging from basic banking and introduction to data processing to securities and investments and business law.

PPP students must take all requirements in English, history, math, physical education, and foreign language. In addition, the program may require additional courses that support technical training, such as typing or computer programming. PPP students typically attend school from 8 a.m. to 4 p.m. each day, compared with the normal 9 a.m. to 3 p.m. school day. And these students have a full 12-month program each year, with

summer school required. As a result they usually wind up with more than the necessary number of credits for graduation. Attempts are made to coordinate the curriculum among academic courses, as well as between academic and technical training.

Internships supplement course work—a variety of experiences located outside the classroom. PPP students spend time in labs learning job preparation skills, and some internships are in local companies. For example, for business and finance students there may be summer or after-school placements in federal agencies, banks, or insurance companies involving accounting, bookkeeping, or data processing tasks. For pre-engineering students these positions may be at PEPCO, IBM, the U.S. Navy Yard, or a local law firm. Usually such placements are for juniors and seniors who are doing well in terms of earning course credits.

These programs are not primarily directed at job placement, however, but rather at post-graduate training. Thus internships may also involve other types of summer or after-school experiences. Examples include summer training sessions at local universities, such as the engineering programs at the University of Maryland and the Exeter Summer Academy, or a landscaping course at Catholic University. Dunbar students also have an arrangement with Howard University for use of their lab facilities. Program statistics show that 63 percent of PPP seniors go on to college. This year 67 percent of Dunbar seniors had been accepted by a college, as had 90 percent of Woodson seniors.

In addition to program courses and internships, there are enrichment activities, including guest speakers. For example, the business and finance students heard talks on telephone techniques, dressing for success, and a debate on drug testing; their pre-engineering counterparts heard a lecture from a NASA representative. They also go on field trips, often to businesses where teachers have had externships. This year the business and finance students went on a three-day trip to New York City to explore financial institutions, while the pre-engineering students attended an industry-sponsored conference on energy. Other trips include cultural events, such as concerts and plays at the Kennedy Center, and a tour of Gettysburg.

Student Selection

Student selection is complex and stringent. Since both Dunbar and Woodson are three-year high schools, grades 10-12, and PPP programs cover four years, grades 9-12, program recruitment takes place at feeder junior high schools and results in a class of 9th graders unique at each school. School coordinators are responsible for most of this recruitment, which occurs each spring. The selection process includes an application and individual interview. Teacher and counselor recommendations often play a role in

selection as well. Students must demonstrate clear interest in the program's specific career field, and their parents must sign participation agreements.

The program is not designed for those who are struggling with school; indeed it selects students who are above average in general. For example, student records are examined for GPAs, which must be a minimum of 2.0 to 2.5, depending on the school. Participants are also required to have grade-level standardized test scores. At Dunbar, strong math and science ability is a prerequisite, while at Woodson, students must have strong math skills and must complete calculus in the program. To counteract an "elitist" image, the superintendent has directed coordinators to include some students with high interest who may not quite meet one or more requirements. The size of the programs varies considerably from school to school, reflecting variable success in this recruitment process. The attempt is to enroll approximately 50 students per class, but not all schools succeed to this degree.

The Dunbar and Woodson PPP programs are the largest among the seven schools involved. At Dunbar, there were 171 PPP students enrolled in the spring of 1987 (grades 9-12), within a schoolwide student body of about 1,630 (grades 10-12). At Woodson, there were 217 PPP students enrolled, compared with a general student body population of about 1,550. All program students are black, as are 99.9 percent of students in general at the two high schools.

Program Management

The program is well staffed at the district level, which is where central management occurs. Dr. Robert Carlson, executive assistant for corporate relations, sits in the office of the superintendent and serves as a bridge from this office to the program. His work involves promotional efforts and general policy issues. Next comes the director of the public private partnership, Dr. Elizabeth Smith, who took over this role from Patricia Harbour in the spring of 1987. Working under Dr. Smith is an assistant for corporate involvement, LaJoy Mosby. Next there are three coordinators: Polly deButts, coordinator for private sector relations; Essie Page, coordinator for curriculum; and Margaret Smith, program administrator. Finally there are two education specialists who assist the others at the operational level.

At each PPP high school there is a coordinator, responsible for managing the program, and an educational aide. These staff are primarily responsible for developing the local career-focused program at each school site, including arranging internships and the various enrichment activities, in cooperation with business representatives who support the programs. They also work in cooperation with district and school staff, including the school principals, counselors, and program teachers. There are typically four to five core

teachers at each school, in English, math, science, and the technical field. Program students are block scheduled, although the heavy set of requirements often causes scheduling difficulties.

The program has an overall Private Sector Steering Committee made up of business leaders who work with district administrators. This body meets about five times a year, with subcommittees meeting more often as needed. Its functions include developing corporate and community support and providing program oversight. In addition, each school has its own Business Advisory Council. The chairs of these sit on the Steering Committee. The school-level Business Advisory Councils work together to design program features, which includes assisting in student internship placements as well as teacher externship placements. They also help to raise scholarship and special activity funds and contribute to technical curriculum.

Parent Advisory Councils are located at each school. All programs expect parent participation from recruitment through graduation, a fact communicated during the selection process. Parents monitor their own children and meet with teachers when there are problems. They also help coordinate enrichment activities. School coordinators serve as the liaison between the Business Advisory Councils and the Parent Advisory Councils.

The program has had considerable success to date. As noted, it is now involved in seven high schools and has an expanding enrollment districtwide each year. It has increasing visibility throughout the city and is organizing private-sector involvement on an expanding basis each year. For the past two years the program has held a senior recognition ceremony in the spring. This is organized largely by the Steering Committee. It honors the graduates, of whom there were 136 this year. Student scholarships and awards are presented. The mayor, or his representative, has attended, and newspapers and television stations have covered the event.

Staff Development

Staff development has been at the core of PPP from its inception. When the superintendent, Dr. Floretta McKenzie, launched the program in 1981 under Ford Foundation support, it began as an externship and curriculum wiriting project for about 25 of the district's high school teachers. The externships are designed to provide teachers with experiences in PPP career fields. These have continued through the summer of 1987; approximately 70 teachers have now been involved in such experiences. They typically involve a three to four week period over the summer in which teachers are placed in a company, working at specific tasks as well as observing general operations. Teachers are paid through district stipends.

The curriculum writing efforts are continuing, as new teachers are brought into the program each year. While this process was somewhat slow at first, it became well organized and structured around clearly stated educational objectives when J. Marvin Cook was hired to help organize it in the spring of 1984. Since that point, the curriculum that has been developed is extensive and well organized and continuing to grow. In fact, this year the curriculum coordinator and several PPP teachers have worked closely with a like group from the Cleveland public schools, helping them to launch a similar effort.

The Setting

Dunbar High School is located in the central northwest section of Washington, D.C. It opened in 1877, making it the first black high school in the country. Woodson High School is located in the far northeast corner of the city. The district is a large one, with 186 schools and almost 87,000 students. Table 8.1 compares the district and two PPP high schools related to standardized test scores, race/ethnicity, and economic need.

Table 8.1 Public-Private Partnership High Schools Compared to the District

	Dunbar	Woodson	District
Standardized Test Scores			
Reading, grade 11	35	36	31
Math, grade 11	36	35	36
Race/Ethnicity			
Asian/Pacific Islander	-	-	1%
Black	100%	100%	92%
Hispanic	-	-	4%
White	-	4%	
AFDC Family Participation	45%	36%	55%

Washington's population is 70 percent black, 2 percent Hispanic, and 28 percent white/other. Its estimated poverty rate in 1986 was 20 percent, versus a national average of 14 percent. Its Standard Metropolitan Statistical Area (SMSA) overall unemployment rate

in 1986 was 3.5 percent, compared with a national average of 6.9 percent, and its estimated youth unemployment rate was 18.3 percent.

Student Outcome Data

The "hardest" form of data by which to judge the effectiveness of the program is that related to measurable indicators of performance in school. These include retention, credits earned, courses failed, grade point averages, and standardized achievement test scores.

A number of factors makes the analysis procedures used in other Clark Foundation sites difficult here. First, the programs select above-average students. They then insist that students perform well on the usual indicators used in the evaluation, although the exact procedures vary from school to school. For example, both the Woodson and Dunbar programs insist on good attendance. At both schools, program students have to take more than the usual number of courses. In addition, at Dunbar, program students are not allowed to fail a course. These factors make providing meaningful comparisons between program and matched comparison groups difficult or impossible.

A second problem is that no local data collector was provided for in the Washington grant budget, requiring program staff to collect the necessary data. This was difficult for both the evaluators and the program staff, and inevitably led to delays, frustrations, and some inconsistencies, in spite of dedicated efforts. It was particularly difficult at Dunbar High School, due to concerns about confidentiality and past unhappy experiences with information released to the press. One result of this difficulty was that data were provided at both schools only for 11th and 12th graders. Further, at Dunbar, except for 9th grade CTBS scores, data were provided only for the 1986-87 school year.

Thus the analysis of student outcome data in Washington has been difficult. Data are presented here in the fullest form possible. The two schools have been handled differently. At Woodson, where students were matched reasonably well, pre-post and change scores (credits, courses failed, GPA, and CTBS scores) for both program and comparison groups, a difference value at all three points, and a statistical test of the net change difference are presented here.

This was neither possible nor appropriate at Dunbar. First, the only pre data available there were 9th grade CTBS scores. Further, when these were examined, it was impossible to find a matched group of students with CTBS scores as high as those of the program students. While a comparison group was selected, it is *not* matched to the program group on any performance variable. Noting these facts, available data for Dunbar are presented. This includes, for both program and *nonmatched* comparison groups, 9th

and 11th grade CTBS scores and the 1986-87 school year outcome data (credits, courses failed, and GPA).

The tables below display results from these analyses. The "means" and number of students contributing to each mean (N's) are provided for program and comparison group students. Difference scores are positive if program groups outperform comparison groups, and negative if the opposite is true. An asterisk next to a difference score indicates that the difference is statistically significant at the .05 level. Scores have been grouped across grade levels in all cases; grade-by-grade breakouts are available but not presented here.

Table 8.2 Washington Woodson High–School Dropouts, 1986-87

	Total Students	Dropouts	Percent
Program	97	0	0%
Comparison	147	11	7%
Difference	-	-	7%*

Table 8.3 Washington Woodson–High Credits Earned

	Pre-program	1986-87	Net Change
Program	3.7 (93)	5.9 (93)	2.2
Comparison	6.0 (90)	4.9 (90)	-.1
Difference	-2.3	1.0	3.3*

Table 8.4 Washington Woodson High–Courses Failed†

	Pre-program	1986-87	Net Change
Program	.02 (59)	.60 (59)	.58
Comparison	.01 (91)	.18 (91)	.17
Difference	.01	.42	.41*

† A negative difference indicates a superior program group performance on this variable.

Table 8.5 Washington Woodson High–Grade Point Average

	Pre-program	1986-87	Net Change
Program	2.7 (55)	2.4 (55)	-.3
Comparison	2.9 (85)	2.6 (85)	-.3
Difference	-.2	-.2	0

Table 8.6 Washington Woodson High–Reading and Math Test Scores
(grade equivalent)

	9th Grade	11th Grade	Net Change
Reading			
Program	10.4 (70)	11.6 (70)	+1.2
Comparison	10.3 (64)	11.6 (64)	+1.3
Difference	+.1	0	-0.1
Math			
Program	11.1 (71)	11.9 (71)	+.8
Comparison	10.7 (66)	11.6 (66)	+.9
Difference	+.4	+.3	-0.1

These data show a number of things:

- The program was very effective at keeping students in school and increasing the number of credits students earned.
- The program was very ineffective at reducing the number of courses failed. This may have been due to the more difficult courses and schedule of program students.
- There was no difference between the program and regular high school with respect to effect on grades or standardized test scores in reading and math.

Table 8.7 Washington Dunbar High–Credits Earned

	1986-87
Program	21.0 (56)
Comparison	19.7 (55)
Difference	+1.3*

Table 8.8 Washington Dunbar High–Courses Failed†

	1986-87
Program	0
Comparison	1.16 (51)
Difference	-1.16*

† A negative difference indicates a superior program group performance on this variable.

Table 8.9 Washington Dunbar High–Grade Point Average

	1986-87
Program	2.6 (71)
Comparison	2.2 (55)
Difference	+0.4*

Table 8.10 Washington Dunbar High–Reading and Math Test Scores
(percentiles)

	9th Grade	11th Grade	Net Change
Reading			
Program	70.8 (64)	81.7 (64)	+10.9
Comparison	51.0 (27)	39.8 (27)	-11.2
Difference	+19.8	+41.9	+22.1*
Math			
Program	77.5 (64)	86.7 (64)	+9.2
Comparison	59.6 (27)	44.0 (27)	-15.6
Difference	+17.9	+42.7	+24.8*

School dropout data were not available at Dunbar.

These data show several things:

- First, program students are clearly among the best at the high school, and so high in standardized test scores in 9th grade that no match group could be found.
- As would be expected, these program students outperform *nonmatched* comparison group students on credits, courses failed, and grade point average at a statistically significant level.
- Program students present a picture of rising standardized test scores between 9th and 11th grade, while the comparison group declines during the same period. Thus while the two are somewhat divergent at the beginning of high school, they are dramatically so by 11th grade.

Student Questionnaire Responses

A questionnaire was administered to students at the end of the 1987 spring semester (no pre-program questionnaire was used here, due to lack of a local data collector). This form covered career-related experiences, plans and attitudes, as well as attitudes toward school, self, and the program. Responses have been grouped across the four grade levels of students at each high school. A total of 157 questionnaires were received, 52 from Dunbar and 105 from Woodson. All figures are in percents.

Table 8.11 Washington Student Questionnaire Responses

	Dunbar	Woodson
Career-Related Experiences		
Have learned about choosing a career, finding a job, etc	58	66
Have heard business speakers and visited companies	92	77
Have held a job	100	91
Career-Related Plans and Attitudes		
Have a specific plan for what to upon graduation from high school	27	27
This plan includes higher education	86	76
Have a long-term career goal	80	76
View making career plans in high school as important	96	100
View gaining job skills while in high school as important	98	97
Attitudes Toward School and Self		
Liked school during the past year	62	68
Liked self after the past year	72	89
Attitudes Toward the Program		
See good career opportunities in their future	90	90
See good chance of finding a job upon graduation	79	92
Have positive feelings about the program	74	69

School Personnel Responses

Six Dunbar and six Woodson staff completed the "School Staff Questionnaire," providing their perspectives on various program aspects. This includes 11 teachers and one school coordinator. Their responses suggest the following:

1. Collaboration with the business community "increased significantly" as a result of the program.

2. "Minor" changes in the operation of the high schools have taken place to accommodate the program, along with "major" changes in curriculum.

3. Teachers were satisfied with student selection procedures, and most were also happy with drop procedures.

4. In comparing what existed previously for the program's target group with what the program provides, school staff saw improvements in books, exposure to business respresentatives, and career-related curriculum, instruction, and counseling.

5. Field trips, mentorships, and summer and school-year internships were all seen as "highly useful" student activities.

6. In rating changes stemming from the program, teachers saw clear improvements in the following student characteristics: occupational knowledge, interest in school and learning, self-esteem, attendance, grades, and discipline.

7. Teacher ratings of other teachers, counselors, and administrators in the schools ranged from "very" to "slightly" supportive of the program.

8. Program planning was rated from "good" to "excellent."

9. On a seven-point scale, the mean rating of the program "in concept" was 6.9, and "as implemented" to date, 5.8.

10. The program's greatest strengths were seen to be the instructional staff, strong private sector involvement, and the support system provided for student development.

11. The program's greatest weaknesses were seen to be difficulties in coordination with the regular school program and the need for increases in various types of support (classroom space, equipment, finances).

Summary

A number of factors make drawing firm conclusions about the Public-Private Partnership Program difficult. It operates in many schools, and the programs vary from school to school. These variations include not only the school settings but the curriculum and focus of training. While the student selection process is consistent across sites, the specific criteria used within that process varies. Another problem was the absence of a local data collector dedicated to the evaluation and able to provide consistency in gathering data. And the matched comparison group evaluation design employed at other Clark Foundation sites proved unworkable at one school, given the unique set of students enrolled in the program.

Nevertheless, certain conclusions are possible. The program is broad and growing, with 700 students involved in 1986-87. It is well supported by the district. It has led to the development of a substantial and impressive body of curriculum. At each program school there is a well articulated set of courses across three or four high school grade levels. These and related activities offer a challenging high school experience to program participants. Private-sector involvement is generally in place and a contributing element of the program, and, to a lesser degree, the same is true of parental involvement.

Student outcome data are hard to draw clear conclusions from. At Woodson, the program seems to be having a substantial effect on school retention and credits earned, while at the same time to be increasing the number of courses failed. No effect is apparent on grades or standardized test scores. At Dunbar, program participants are a superior group of students with whom it is difficult to make comparisons. They begin with high standardized test scores, and these increase through high school, in contrast to the typical pattern of decline. They outperform other Dunbar students on credits earned, courses failed, and grades, but given their selective makeup, this would be expected.

Student questionnaire responses suffer from lack of pre-program data with which to compare year-end responses. Nevertheless, the program seems to be providing many career-related experiences, and a large percentage of students have had some type of job. Most students plan to attend college and have a long-term goal. Virtually all view making career plans and gaining job skills in high school as important. Most see good career opportunities in their future and like the program. Staff feedback is also generally positive.

On balance this is a good report card. There is no question that a substantial program is underway. It has strong district support and broad private-sector involvement. It is structured around an impressive set of courses, curriculum, and supporting activities in each of the seven high schools. Student outcome data are inconclusive, but they suggest a pattern of higher program student retention and credits. Student and staff questionnaire responses are largely positive. While the program is too big and diverse to allow easy generalizations, there is much to be said of its accomplishments.

Summary and Conclusions

It is difficult to make comparisons among sites, for several reasons. They operate in different cities and schools with varying conditions and problems. They are at different stages of development. Cleveland and Oakland, for example, are relatively new, while others are more mature. Also, the programs have varying designs and offer students different training and services.

Nevertheless, in determining the relative success of the programs it is helpful to think in terms of comparisons. Since the focus of this evaluation and report is on student outcomes, there is value in looking at outcomes across sites. Much of what follows, therefore, is simple statistical comparisons among sites on student outcome variables. Yet, it is important to interpret these data with some understanding of the contexts and programs that lay behind them. Thus following the presentation of data, we discuss program contexts and then draw conclusions.

Student Outcome Data

Since the record-keeping practices and resulting data vary from site to site, for the student outcome variables we present below the "*Net Change Difference*" value, which shows for each site the *difference* in performance between the program and matched comparison group from the year prior to program entry through the 1986-87 school-year. This provides a consistent figure from site to site, and is the single most significant number with which to judge the impact of the program on students for each variable. To test differences between program and comparison group students for dropouts, we used a chi-square test; for the other variables, a two-tailed t test for independent means was performed on the "net change difference."

Cleveland had no students involved this year, and Oakland no academic program component, so the following data encompass only five sites. If a number is positive, it indicates that a program group outperformed a comparison group; if negative, the opposite. An asterisk indicates a statistically significant difference between the two groups at the .05 level of probability. Data on enrollments and retention precede outcome data.

Table 9.1 Enrollments

	Chi	Den	Oak	Pitt	Port	Wash*	Total
Total	568	199	270	113	73	388	1611
Ethnicity							
Asian/Pac. Is.	-	-	9%	-	-	-	1%
Black	73%	4%	84%	100%	60%	100%	75%
Hispanic	27%	79%	6%	-	2%	-	20%
White/Other	-	17%	1%	-	38%	-	4%
Gender							
Female	51%	50%	69%	51%	52%	64%	57%
Male	49%	50%	31%	49%	48%	36%	43%

* Washington figures are for just the two high schools included in the evaluation, Dunbar and Woodson.

As Table 9.1 indicates, the population of students served by these programs is almost entirely minority: 75 percent black and 20 percent Hispanic. It is weighted somewhat toward females in two sites.

Table 9.2 School Dropouts, 1986-87

	Chi	Den	Oak	Pitt	Port	Wash†	Avg
Program Students	2.6%	16.6%	1.1%	4.4%	2.3%	0	4.3%
Comparison Group	9.9%	30.1%	7.2%††	29.7%	11.9%	7.5%	15.3%*

† Washington, D.C., dropout data are from just one school, Woodson.

†† Comparison dropout figures at Oakland are schoolwide, not from a matched comparison group, and have therefore neither undergone a significance test nor been included in the cross-site average.

The figures in Table 9.2 reflect the difference between program and comparison groups in each site in the percent of students who dropped out of school during the 1986-

87 school year. A chi-square test performed on these differences shows them to be statistically significant in all sites, and across sites. While extensive efforts have been made to obtain accurate dropout data, it should be noted that this is a difficult task. Most schools keep poor records on this dimension. Since program staff are sometimes able to supply information on their own dropouts, while there is no one to do so for the comparison group, the result may be a bias in favor of program students. Thus, while encouraging, the data here should be viewed cautiously.

Table 9.3 Attendance Differences (in percents)

	Pre-program	1986-87	Net Change
Chicago			
Dunbar	1.4	3.3	1.9
Farragut	1.9	6.8	4.9*
Denver			
North	5.6	-1.2	-6.8
West	1.0	1.7	.7
Pittsburgh	-6.6	1.3	7.9*
Portland	1.4	.9	.1
Washington	Attendance Data Not Available		

Table 9.3 demonstrates the difference in percent of days attended between program and comparison groups in each site. The change in this difference between students' pre-program year and the 1986-87 school year was statistically significant in favor of program students in Chicago (Farragut High School) and Pittsburgh.

Table 9.4 Credits Earned Differences

	Pre-program	1986-87	Net Change
Chicago			
Dunbar	NA	.9*	-
Farragut	NA	1.3*	-
Denver			
North	6.8	8.8	2.0
West	-.5	4.8	5.3
Pittsburgh	-.3	.8	1.1
Portland	.3	.7	.4
Washington (Woodson)	-2.3	1.0	3.3*

Table 9.4 indicates the difference in numbers of credits earned between program and comparison group students in each site. The change in this difference between students' pre-program year and the 1986-87 school year was statistically significant in favor of program students at Woodson High School in Washington, D.C.

Pre-program data was unavailable on this variable from Chicago, because students entered the program in 9th grade and were, therefore, in 8th grade during their pre-program year; it proved impossible to obtain consistent data from the several 8th grade schools feeding into these high schools. Tests performed on the difference between program and comparison group means for the 1986-87 school year show program groups to be significantly outperforming comparison groups at both Chicago high schools. Since the two groups *are* matched on several other variables, one may put at least a limited amount of confidence in the validity of these differences.

Table 9.5 Courses Failed Differences†

	Pre-program	1986-87	Net Change
Chicago			
Dunbar	-.4	-1.3	-.9*
Farragut	-.1	-1.1	-1.0*
Denver			
North	-2.1	-.1	2.0*
West	.5	.2	-.3
Pittsburgh	0	-.2	-.2
Portland	0	-1.1	-1.1*
Washington (Woodson)	0	.4	.4*

† A negative difference indicates a superior program group performance.

Table 9.5 shows the difference in number of courses failed between program and comparison group students in each site. The change in this difference between students' pre-program year and the 1986-87 school year was statistically significant in favor of program students in Chicago and Portland. It was statistically significant in favor of *comparison group* students in one Denver (North) and one Washington (Woodson) high school.

Table 9.6 Grade Point Average Differences

	Pre-program	1986-87	Net Change
Chicago			
Dunbar	NA	.3	
Farragut	NA	.3*	
Denver			
North	.4	.2	-.2
West	-.4	-.1	.3
Pittsburgh		Not Available	
Portland	.1	.5	.4*
Washington (Woodson)	-.2	-.2	0

Table 9.6 reveals the difference between program and comparison group students on grade point averages in each of the sites, using a 4.0 grade point system. The change in this difference between students' pre-program year and the 1986-87 school year was statistically significant in favor of the program students in Portland.

As with "credits earned," pre-program year data were unavailable from Chicago, when students were in eighth grade. Tests of differences between the two groups based on 1986-87 school year figures show program students to be significantly outperforming their comparison group counterparts. Since these two groups are matched on other variables, one may place limited confidence in the validity of these differences.

Table 9.7 Standardized Test Score Differences

	Pre-program	1986-87	Net Change
Reading			
Chicago			
Dunbar	-4.2	-2.7	1.4
Farragut	-3.5	-1.0	2.5
Denver			
North	NA	-2.4	
West	NA	-2.3	
Pittsburgh	-2.1	-6.4	-4.3
Portland	Not Available		
Washington (Woodson)	.1	0	-.1
Math			
Chicago			
Dunbar	-9.3	-3.2	6.1*
Farragut	2.7	3.2	.5
Denver			
North	NA	-8.0	
West	NA	-3.4	
Pittsburgh†	-.4	1.4	1.8
Portland	Not Available		
Washington (Woodson)	.4	.3	-.1

† This Pittsburgh score is for "language"; Pittsburgh does not administer a math standardized test.

Table 9.7 indicates the difference between program and comparison group students on standardized test scores in each site. The change in this difference between students' pre-program year and the 1986-87 school year was statistically significant in one site, Chicago, for one school, Dunbar, in math.

To summarize these results by variable, most differences between program and comparison groups were not statistically significant. Those differences which were statistically significant can be summarized as follows.

- Dropouts: all sites show a clear program group superiority, which is consistently statistically significant; the programs are retaining students in school.
- Attendance: program students in Chicago (Farragut) and Pittsburgh outperform their comparison group counterparts.
- Credits earned: program students in Chicago and Washington (Woodson) outperform their comparison group counterparts.
- Courses failed: program students in Chicago and Portland outperform their comparison group counterparts, while program students in Denver (North) and Washington (Woodson) underperform their comparison group counterparts.
- Grade point averages: program students in Chicago and Portland outperform their comparison group counterparts.
- Standardized test scores: program students at one Chicago high school (Dunbar) outperform their counterparts in math.

To summarize by site, program students in all sites have higher school retention. Chicago program students perform significantly better on all other variables as well. Those in Portland do so on two other variables (courses failed and GPA), those in Pittsburgh on one (attendance), and those at one Washington high school on one (credits earned). Conversely, program students at one of the schools in Denver and Washington do significantly worse on credits earned.

Program Contexts

While the above student outcome presentations reflect comparisons from site to site, they fail to provide an understanding of the many elements that underlie these differences. While there are many such elements, four are of central importance:

- Program age/maturity
- Program design
- "Political" strength
- Quality of implementation

These factors interact, influencing each other. They offer important insights into the outcome data.

Program Age or Maturity. Five programs are now mature, being three or more years old, with all classes of students in place, and at least one class of program graduates. These are Chicago, Denver, Pittsburgh, Portland, and Washington, D.C. Cleveland and Oakland are just two years old; Cleveland is still in the midst of its development.

Program Design. Four sites have programs that include multi-year services, with courses articulated from year to year, academic components among these courses, and exposure to the private sector in fields with career potential (thereby raising career ambitions). These are the two academies in Pittsburgh and Portland; the Chicago Job Readiness Program (its placement program is somewhat focused); and the Public-Private Partnership Program in Washington, D.C. Cleveland appears to be headed in a similar direction.

Oakland, by contrast, offers a short-term job preparation experience with relatively unfocused job placement. Denver falls between these two poles, with essentially a one-year service, a mixture of academic and job preparation components, and an unfocused job placement program.

"Political" Strength. "Political" reflects the depth of support, both financial and otherwise, on the part of the host school district and business community. While it is impossible to assess this in any precise, numerical way, it clearly varies from site to site.

This element appears generally strong in Chicago, Pittsburgh, Portland, and Washington, D.C. It is strong on the private sector side in Denver, but weaker within the schools. It is developing in Cleveland, but needs to be consolidated. And it is relatively weak in Oakland on both the private sector and school sides.

Quality of Implementation. This is a difficult factor to define in any precise way. Its most important determinant is the strength and stability of the staff, which in turn affects the program's organization and virtually all aspects of implementation. In Chicago it has been unusually strong and stable from the start, and this appears to be true in Washington also. In Pittsburgh and Portland it is strong within the host school, somewhat less so in terms of Urban League (Portland) or private sector (Pittsburgh) support, although in both cases on balance it is good.

The other sites vary. In Cleveland the implementation was weak initially and now appears strong. Contrastingly, in Oakland it was fairly strong initially, and now due to a lack of political support is weak. Denver has suffered from a chronic problem of staff instability, particularly in terms of the school-based coordinators, which has clearly hurt its implementation.

These four factors add up to a different picture in each site. To summarize, by site:

- Chicago is strong on all counts.
- Cleveland is still developing, but should its design follow Washington's, the implementation stay strong, and the support continue to develop in the schools and business community, the prognosis is good.
- Denver's one-year service design and staff instability have hurt its implementation and its school support. But its business support remains strong and may lead to effective replications.
- Oakland's implementation improved over last year, but its brief service design and difficult political problems during this formative year give it a questionable prognosis.
- Pittsburgh and Portland are similar, with mature, well-designed programs that have been well implemented and appear established and stable, with a few remaining coordination and business support problems.
- Washington, D.C., is also a mature, well-designed, politically strong, and well-implemented program.

Conclusions

It is impossible to escape the relationship between the programs' contexts and their relative success in terms of student outcomes. Chicago, strong on all four context variables, is the clear champion also in terms of student outcomes; evidence of this is overwhelming. Pittsburgh and Portland, strong on most context variables, also do relatively well, showing some evidence of effect on students.

By contrast, Denver, with a slighter design, problems with implementation, and weaker school support shows little evidence of effect on students. The Cleveland and Oakland programs were not structured in a way to allow assessments of student outcomes. And in Washington the evaluation itself encountered difficulties, although there was some evidence suggesting positive program impact.

This pattern leads to the conclusion that there are a number of conditions necessary for such programs to have measurable impacts on students, none of which are sufficient by themsleves. These include:

1. A good program design, with both academic and job preparation elements, a multi-year treatment, and focused exposure to business and job placements.

2. Strong school and business support.

3. High quality implementation, particularly in terms of staffing and organization.

4. Sufficient developmental time.

When all these conditions are met, as in Chicago, the resulting impact can be uniformly positive. When any are missing or questionable, results may be less consistent, although there may still be significant evidence of impact, as in Pittsburgh, Portland, and Washington, D.C. When several conditions are missing or questionable, the problems tend to interact and the results are not likely to be promising.