# Policy Paper No. 91-9-1 <br> Follow-up Survey of the June 1988 and June 1989 <br> Graduates of the California Partnership Academies 

## Charles Dayton and David Stern September 1991

## Charles Dayton is a Policy Analyst with PACE.

David Stern is a Professor of Education in the School of Education, UC Berkeley.
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, Michael W. Kirst, and Allan R. Odden. The analyses and conclusions in this paper are those of the authors and are not necessarily endorsed by the Hewlett Foundation.

This report was funded jointly by the California Department of Education and the William and Flora Hewlett Foundation. Support for this work is gratefully acknowledged.

Additional copies of this paper, PP91-9-1, are available for $\$ 5.00$ per copy, prepaid. (California residents add appropriate sales tax.) Shipping charges: $1-2$ copies $=\$ 2.00$, $3-5=\$ 3.00,6-10=\$ 5.00,10+=\$ 7.00$. Prices are subject to change. Please request PACE Order Forms for updated prices of all publications. Mail all orders and inquiries to:

PACE<br>School of Education<br>University of California<br>Berkeley, California 94720

## Checks payable to the Regents of the University of California

Policy Paper No. PP91-9-1
Policy Analysis for California Education (PACE)
Berkeley, California
September 1991

This publication was produced with Apple Macintosh IIcx computers and an Apple LaserWriter IIntx printer. The equipment was donated to PACE by Apple Compitter, Inc.

## Executive Summary

This study compares the post-secondary experiences of members of the first two graduating classes of a number of the California Partnership Academies with their matched comparison group counterparts. It examines experiences related to school and work for these graduates. A description of the Academy model is presented, followed by a summary of the prior in-school evaluation findings. The procedures in this follow-up study are described, with one strong caution: The study deliberately examined only graduates, and because the Academy groups are known to have had lower dropout rates than their comparison group counterparts, this probably introduces a conservative bias in the findings. That is, if high school dropouts had been included, differences in favor of the Academy students probably would have been larger because there were more dropouts from the comparison groups.

With a few exceptions, Academy and comparison group graduates surveyed in this study are following parallel courses after they graduate. Specifically:

- About two-thirds of both groups are enrolled in school the first year after graduation, a figure which drops somewhat the second year, but remains above half;
- About two-thirds of both groups are also working the first year after graduation, a figure which holds steady the second year for Academy graduates and drops slightly for comparison graduates;
- About four-fifths of those enrolled in school from both groups attend community colleges;
- More Academy graduates plan on eaming a four-year degree ( $61 \%$ versus $52 \%$ ), a disparity that widens among those actually enrolled in a degree program ( $63 \%$ versus $50 \%$; in contrast, more comparison graduates plan on earning a graduate degree ( $26 \%$ versus $15 \%$ );
- About three-fourths of enrolled students attend school full time from both groups;
- While most of those working found their jobs either through a friend or relative, or directly through an employer, a significantly larger fraction of Academy graduates got help from their high school in this respect ( $18 \%$ versus $7 \%$ );
- Academy graduates who are working put in an average of about three and a half more hours of work per week; this difference is statistically significant, but there is no significant difference in hourly earnings;
- Significantly more Academy graduates are working in jobs related to their high school training ( $55 \%$ versus $28 \%$ );
- Both Academy and comparison group graduates rate their high school preparation and how they are doing currently as "fairly well" (the second highest rating on a five-point scale).

Because this general lack of differences between the two groups runs counter to the findings of several in-school evaluations of Partnership Academies, possible reasons for this finding are suggested.

- Limitations of the study may have obscured real differences. These limitations include: 1) the ignoring of dropouts, more of whom came from the comparison groups; 2) the survey's response rate; 3) "noise" in the data that make it difficult to find statistically significant differences.
- The fact that the program ceases to operate at the point of graduation, which would lead one to expect a weakening of effect at this point.
- The possibility that there are differences between the two groups that are more subtle than those detectable by simple measures of enrollment patterns or hours worked and wages earned, such as the greater correspondence found between high school training and subsequent work among Academy graduates, which may lead to differences further in the future.

It is important to recognize that the absence of major advantages for Academy students after they graduate from high school does not signify failure of the Academy programs. Previous evaluations have demonstrated that Academy students perform better in high school, and are more likely to graduate, than students in the comparison groups. The fact that Academy graduates are doing equally well as comparison students in the first year or two after graduation indicates that this gain in performance during high school was not obtained merely by lowering standards or diluting the curriculum in Academy programs. There is no evidence that Academy graduates are viewed as holding second-rate diplomas, or that Academy programs have achieved higher graduation rates at the expense of lower success rates after high school.

## CONTENTS

Page
Executive Summary ..... iii
Policy Analysis for California Education ..... vii
Introduction ..... 1
California Partnership Academies ..... 1
The In-School Evaluation ..... 3
The Graduate Follow-up Survey ..... 4
Response Rate ..... 5
Cautions ..... 6
Results of the Survey ..... 9
Status of Graduates ..... 9
Graduates in School ..... 11
Working Graduates ..... 15
Program Ratings and Feedback ..... 18
Related Research ..... 20
San Diego Graduates ..... 20
Peninsula Academies Graduates. ..... 22
Conclusions ..... 24
Appendix: Graduate Interview Guide. ..... 27
Related Reports ..... 32

## Policy Analysis for California Education

Policy Analysis for Califomia 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 at Berkeley, Stanford University, and the University of Southern California. It is funded by the William and Flora Hewlett Foundation and co-directed by James W. Guthrie, Michael W. Kirst, and Allan R. Odden. PACE operates a satellite center in Sacramento.

PACE efforts center on five tasks: (1) collecting and distributing objective information about the conditions of education in Califormia, (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.

Advisory Board

Joseph Alibrandi Chief Executive Officer, The Whittaker Corporation

Warren Bennis
Distinguished Professor of Business Administration,
University of Southern California
Mario Camara
Partner,
Cox, Castle \& Nicholson
Gerald C. Hayward
Deputy Director, National Center for Research in Vocational Education

Cornell Maier
Chairman/CEO (Retired)
Kaiser Aluminum and Chemical Corporation

Robert Maynard Editor and President, The Oakland Tribune
A. Alan Post California Legislative Analyst Retired

Sharon Schuster
President, American Association of University Women

Floraline Stevens
Director, Program Evaluation and Assessment
Los Angeles Unified School District
Eugene Webb
Professor
Graduate School of Business
Stanford University

Aaron Wildavsky
Professor of Political Science
University of California, Berkeley

## INTRODUCTION

## California Partnership Academies

From the fall of 1985 through the spring of 1988 twelve Partnership Academy programs were operated in California under State sponsorship. Two of these were the Peninsula Academies, operated since 1981 by the Sequoia Union High School District in Redwood City. The remaining ten were replications of these. The Academies are directed at reducing dropouts among "at-risk" high school youth, through a combination of technical training, academic-vocational integration, motivational features, and private sector involvement.

The California Partnership Academies are three-year high school programs, in grades 10-12, structured as a school-within-a-school, that incorporate:

- Curriculum focused on an occupational theme, coordinated with academic classes that teach essential academic skills;
- A student selection process that identifies ninth graders who are poor achievers but have potential for improvement;
- A small group of teachers who work together to plan and implement the program;
- A variety of motivational activities, including parental support, a well developed reward structure, speakers, field trips, a mentor program, paid work experience, and constant monitoring of progress with feedback to students.

| The California Partnership Academies Model Academy Three-Year Progression |  |  |  |
| :---: | :---: | :---: | :---: |
| Grade 10 | Grade 11 | Summer | Grade 12 |
| Students enter program | Classes: |  | Classes: |
| Classes: | English, math, science or | Summer school if needed | Technical, perhaps |
| English, math, science or social sudies, technical | social studies. lechnical | Students who are performing well | English and/or economics; mainstreamed |
| Elective classes | Elective classes | are provided summer jobs in | in other classes |
| Speakers \& field trips | Speakers \& field trips | a local company | Preparation for either college |
| Motivational activitics | Motivational activitics | Close supervision | entry or work |
| Parental support | Mentor program | End-of-summer rating | Possible p.m. part-ime work |

## The California Partnership Academies Model

Curriculum. The curriculum combines academic and career-related classes. It prepares students for both post-secondary education and employment.

Career Theme. The technical focus for an Academy is determined by an analysis of the local labor market, with an eye toward fields that are growing and healthy, that offer jobs with career "ladders," and that have companies willing to support the program. Academies technical focuses range from business technology to health, electronics, the media, agribusiness, the building trades, natural resources, finance, and retail trade. The technical education is kept fairly broad, focusing on fields and occupational clusters rather than specific jobs. Use of computers is a feature of all Academies.

Scheduling. Students take their Academy courses together, as a school within a school.

Staffing. Teachers request to participate in the program, and must be willing to work with under-achieving students. They are usually provided with a reduction in class load (typically from five to four classes per day) and student load (from an average of 3035 per class to 20-25). The teachers use their extra preparation period to meet regularly to plan the program activities and curriculum, coordinate with business representatives, meet with parents, and devise strategies for dealing with problem students.

Student Selection. Several criteria are used to determine student eligibility: low attendance, insufficient credits, disinterest in the regular academic program, and economic disadvantagement. The program is voluntary: students must apply, be interviewed, and be selected on the basis of need and interest. About 50 students are typically selected for entry each year, enough to comprise two sections of a sophomore class.

Business Involvement. The "Partnership" at each Academy is between schools and businesses. Business representatives: (a) serve, along with teachers and administrators, on an Academy steering committee that oversees the program; (b) help to develop the technical curriculum, to ensure its currency and relevance to their field;
(c) provide speakers for Academy classes, and host field trips to give students a perspective of the work place; (d) provide mentors who serve as career-related role models and personal points of contact in the field of training; and (e) provide summer jobs and parttime school-year jobs.

The Mentor Program. In the eleventh grade, a mentor is matched to each Academy student. Mentors are employees of participating businesses who volunteer to be "career related big brothers or sisters," spending a minimum of two hours per month with the student. Mentors help students develop work skills, and sometimes provide tutoring in needed subjects. They also serve as role models and illustrate the relationship between education and job quality.

Work Experience. After the junior year those students performing well enough to be on track for graduation are placed in summer jobs. Students apply for these jobs as they would in the open market; i.e., they prepare resumes, complete job application forms, and have interviews. Companies make the hiring decision.

The State of California supports Academies. It provides grants which must be matched by direct or in-kind support by the receiving districts and again by the local business community. Thus the funding mechanism is designed to encourage cooperation among school districts and the private sector. In addition, the state grant is based on a formula reflecting program performance; its size is determined by the number of program students who perform adequately in terms of attendance and earned credits each year.

## The In-School Evaluation

An extensive evaluation of the Partnership Academies was conducted by PACE from the fall of 1985 through the spring of 1988 . This evaluation considered both process and outcomes. The process evaluation addressed the quality of program implementation and the degree to which programs followed the Academy model. Each site was rated in terms of 27 elements which comprise the full model. In 1986-87 the ratings ranged from 7.5 to 23 , with a mean of 18.0 ; in 1987-88 they ranged from 14 to 26.5 , with a mean of 20.7. Converted to "numerical grades," the average "implementation grade" increased in 1987-88 from 72 percent to 81 percent.

The outcomes evaluation addressed the degree to which student performance changed as a result of the Academies. A comparison group design was used, in which a group of non-Academy students similar to those in each Academy were selected and tracked along with the Academy students. Comparisons were made in terms of retention in school, attendance, credits earned, courses failed, and grade point averages. A regression model was used to test for differences between program and comparison groups on these dimensions; this model corrects for differences in prior school performance, gender, race or ethnicity, and date of birth.

Of 270 tests of differences between Academy and comparison group students on their performance during these three years, 61 were statistically significant in favor of Academy students and 11 in favor of comparison groups. These differences were spread about equally across four variables: attendance, credits earned, courses failed, and grade point averages.

A fifth dimension, retention in school, showed a statewide dropout rate among the first cohort of Academy students, across three years, of 7.3 percent and among comparison group students of 14.6 percent. The transfer rate among Academy students was
25.6 percent and among comparison students 33.1 percent. Thus the attrition rate, the combination of dropouts and transfers (often called the dropout rate), was 32.9 percent for Academy students and 47.7 percent for comparison students. These figures suggest the Academies have some effect in reducing transiency between schools and substantial effect in reducing dropouts.

Feedback from student questionnaires showed that most students in the Academies liked the Academy equipment and materials they worked with, saw a clear connection between their Academy studies and post-graduate plans, and liked the Academy better than their regular high school program. Relatively few students were developing career plans through the Academies; most planned to attend some form of college upon graduation. A significant proportion of students reported more positive feelings toward their classwork after being in the Academy.

## The Graduate Follow-up Survey

While this in-school evaluation provided evidence of the Partnership Academies' impact on students while they were in school, another objective was to check that these positive in-school results were not obtained merely by watering down the curriculum or reducing expectations for Academy students. Therefore, a subsequent phase of evaluation was designed to monitor students' postgraduate performance. Would Academy graduates succeed in the labor market and post-secondary education at least as well as the comparison graduates?

To address these questions the William \& Flora Hewlett Foundation sponsored a follow-up survey of the June 1988 graduates from the Academies and their comparison groups. The results of this survey were published in a PACE report (\#PP90-1-1) entitled "Graduate Follow-up Survey of the June 1988 Graduates of the California Academies," issued in January 1990. A second survey was co-sponsored the following year jointly by the Hewlett Foundation and the California Department of Education, conducted in the late winter and early spring of 1990. This survey included a second interview of the June 1988 graduates, as well as an initial interview with the June 1989 graduates. It is the results of this second survey that are reported here.

The interviews both years were nearly identical, with only minor differences. Interview protocols were structured into sections pertaining to postgraduate education,
work, and military service, as well as perceptions about their high school and post-high school experiences. The full Interview Guide used in the survey is included in an Appendix.

While there were eight Academy sites included in last year's survey, three of these dropped out this year. In two cases (Oak Ridge and Rio Cazadero), this was because the Academies ceased to function and had no graduates in 1989. In a third case, Oakland Tech, it was because of difficulties in obtaining enough student contact information to make the results meaningful. Two other sites were added, Independence and Silver Creek High Schools in the East Side Union High School District in San Jose. These two Academies graduated their first classes in June 1989. Thus the total number of respondents with valid interviews this year was 420, including both June 1988 and June 1989 graduates, compared with 233 June 1988 graduates in the first year.

## Response Rate

Tables 1 a and lb on the following pages provide a picture of the survey groups that were interviewed in each site. For the first cohort, the June 1988 graduates, precise information was available about the number of students who were in school during their senior year and proceeded to graduate, and the response rate could be gauged accordingly. For the second cohort, the June 1989 graduates, the most recent student lists were from the junior year in high school (the last year of the in-school evaluation), so no precise data were available to judge how many of these students graduated and were in the pool of potential respondents. Thus, while the response rate appears to be higher among the first cohort, much or all of this difference may be due to the lack of precise information about how many of the second cohort members remained in school through graduation.

It is often difficult to locate students after they graduate, and sometimes to secure their cooperation for such a survey. Extensive efforts were made to reach these graduates. They were asked to complete a contact information form befure they left high school; many did so, although some refused or could not be located. Where graduates either did not provide contact information or were not at the contact indicated, extensive efforts were made through the high school and telephone information service to track them down. When contact points were accurate but graduates were either reluctant to cooperate or rarely at home, at least four or five attempts were made to reach each one. Only when further effort seemed pointless were attempts to reach them stopped.

## Cautions

One problem is the differential response rate between the two groups. That is, a larger proportion of Academy graduates responded to the survey than did comparison group members. While this difference is smaller in this survey than in last year's ( $5 \%$ for TABLE 1a Response Rates for June 1988 Graduates*

the first cohort and $3 \%$ for the second, compared with $12 \%$ last year), it might nevertheless introduce some bias. The reason is that while the two full groups were matched originally, the respondent subsamples being reached in this survey may no longer be. Usually
graduates engaged in some responsible activity, such as college or work, are easier to track down than those not so engaged. Thus the group with the smaller response rate, the comparison group, might reflect a more select subsample of the original matched groups.

To examine this possibility, we conducted a check of the data by which the two groups were originally matched, namely ninth grade attendance, credits earned, and grades.

TABLE 1b Response Rates for June 1989 Graduates*
Initial N* Response Rate
High Schools
Bakersfield
Program ..... 23
Comparison Group ..... 4813 (57\%)31 (65\%)
Hiram Johnson
Program318 (26\%)
Comparison Group ..... 56 ..... 16 (29\%)
Mountain View Program ..... 15 ..... 6 (40\%)
Comparison Group ..... 25 ..... 25 ..... 13 (52\%)
Independence
Program ..... 72
Comparison Group ..... 84 ..... 45 (54\%)
40 (56\%)
Silver Creek
Program ..... 52
Comparison Group ..... 35
Menlo-Atherton
Program ..... 25
37 (71\%)13 (37\%)
Comparison Group ..... 387 (28\%)
Sequoia
Program ..... 32
Comparison Group ..... 39
13 (41\%)14 (36\%)
Total
Program ..... 250
Comparison Group ..... 32518 (47\%)

* The "Initial N " is the total number of students in school at the end of their junior year,the last point at which in-school data were gathered. Some of these transferred or droppedout before graduating, but there are no data available on how many.

That is, we looked at this ninth grade performance data for both the Academy and comparison group graduates who were located in the survey, to see whether the respondent groups reflected similar subsamples of the two original groups.

We did find a fairly consistent bias: average ninth grade performance among our respondents did slightly excel that of the group averages at the time of the matching. However, we found very similar patterns of bias for the Academy and comparison groups. The one exception was for first cohort credits, where the Academy respondents reflect a below average subsample and the comparison graduates an above average one. But since this example runs counter to the general pattern, this bias does probably not skew comparisons between the two groups of respondents. These data are presented in Table 2.

Table 2. Response Bias Comparisons. Ninth Grade Scores of Full Original (pre) and Survey Respondent (post) Groups from Academy and Comparison Groups, by Cohort and Outcome Measure: Attendance, Credits, and Grade Point Average (numbers of students are in parentheses)

|  | Academy |  |  |  | Comparison Group |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1985 Cohort |  | 1986 Cohort |  | 1985 Cohort |  | 1986 Cohort |  |
|  | Pre | Post | Pre | Post | Pre | Post | Pre | Post |
| Attendance | 93 (271) | 96 (83) | 85 (162) | 89 (40) | 84 (167) | 87 (76) | 84 (354) | 90 (90) |
| Credits | 49 (292) | 46 (101) | 47 (160) | 54 (37) | 47 (313) | 54 (102) | 50 (338) | 54 (90) |
| G.P.A. | 2.1 (318) | 2.3 (99) | 1.8 (154) | 2.1 (37) | 2.1 (263) | 2.3 (97) | 1.9 (339) | 2.2 (90) |

Another problem is that the analysis uses only data from Academy and comparison group graduates. The three-year in-school evaluation showed that the Academies on average reduced dropouts by half. The decision to survey only graduates was made deliberately, due to the difficulty of locating dropouts and gaining their cooperation, and in order to gain a meaningful estimate of the program's full effects (which accrue over three years). Unfortunately, the result is that even though the graduates that were located seem to be still fairly well matched, they represent unequal proportions of the original matched groups. This may give the findings a "conservative" slant (raising the chance of finding no significant differences between the two groups), since they ignore the dropouts, more of whom come from the original matched comparison groups than the Academies. It is likely
that these dropouts have had less rewarding post-school experiences and would therefore depress the comparison group data were they included.

## RESULTS OF THE SURVEY

## Status of Graduates

Students' main activities are classified in five categories: "going to school," "working," "both school and work," "in the military," and "none of the above." Tables 3a (cohort one) and 3 b (cohort two) that follow show the status of the graduates with respect to these four categories, by site and across sites.

Table 3a. Main Activity of June 1988 Graduates 18 to 21 Months Following Graduation

|  | Going to School | Working | Both Sch. \& Work | $\begin{gathered} \text { In } \\ \text { Military } \\ \hline \end{gathered}$ | None of the Above |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Bakersfield |  |  |  |  |  |
| Program (11) | 36\% | 82\% | 36\% | 0\% | 9\% |
| Comparison Group (24) | 54\% | 46\% | 25\% | 0\% | 8\% |
| Hiram Johnson |  |  |  |  |  |
| Program (27) | 56\% | 59\% | 33\% | 19\% | 0\% |
| Comparison Group (8) | 38\% | 75\% | 38\% | 25\% | 13\% |
| Mountain View |  |  |  |  |  |
| Program (6) | 50\% | 100\% | 50\% | 0\% | 0\% |
| Comparison Group (14) | 64\% | 57\% | 36\% | 7\% | 0\% |
| Menlo-Atherton |  |  |  |  |  |
| Program (15) | 73\% | 67\% | 53\% | 7\% | 7\% |
| Comparison Group (4) | 75\% | 25\% | 0\% | 0\% | 0\% |
| Sequoia |  |  |  |  |  |
| Program (22) | 45\% | 73\% | 23\% | 14\% | 0\% |
| Comparison Group (15) | 73\% | 87\% | 67\% | 0\% | 0\% |
| Total |  |  |  |  |  |
| Program (81) | 53\% | 70\% | 36\% | 11\% | 2\% |
| Comparison Group (65) | 60\% | 60\% | 37\% | 5\% | 5\% |

Table 3b. Main Activity of June 1989 Graduates Six to Nine Months Following Graduation

|  | Going to School | Working | Both Sch. \& Work | $\begin{gathered} \text { In } \\ \text { Military } \\ \hline \end{gathered}$ | None of the Above |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High_Schools |  |  |  |  |  |
| Bakersfield |  |  |  |  |  |
| Program (13) | 54\% | 46\% | 31\% | 0\% | 31\% |
| Comparison Group (31) | 68\% | 84\% | 58\% | 0\% | 7\% |
| Hiram Johnson |  |  |  |  |  |
| Program (8) | 38\% | 100\% | 38\% | 0\% | 0\% |
| Comparison Group (16) | 56\% | 50\% | 25\% | 6\% | 13\% |
| Mountain View |  |  |  |  |  |
| Program (6) | 67\% | 50\% | 33\% | 17\% | 0\% |
| Comparison Group (13) | 54\% | 69\% | 23\% | 0\% | 0\% |
| Independence |  |  |  |  |  |
| Program (40) | 88\% | 70\% | 58\% | 3\% | 0\% |
| Comparison Group (45) | 69\% | 67\% | 42\% | 4\% | 0\% |
| Silver Creek |  |  |  |  |  |
| Program (37) | 62\% | 73\% | 43\% | 0\% | 0\% |
| Comparison Group (13) | 62\% | 69\% | 39\% | 0\% | 0\% |
| Menlo-Atherton |  |  |  |  |  |
| Program (7) | 57\% | 71\% | 29\% | 0\% | 0\% |
| Comparison Group (18) | 83\% | 61\% | 44\% | 0\% | 0\% |
| Sequoia |  |  |  |  |  |
| Program (13) | 62\% | 69\% | 46\% | 0\% | 15\% |
| Comparison Group (14) | 79\% | 86\% | 71\% | 7\% | 0\% |
| Total |  |  |  |  |  |
| Program (124) | 67\% | 69\% | 45\% | 2\% | 6\% |
| Comparison Group (150) | 68\% | 69\% | 44\% | 3\% | 3\% |

Last year's data showed that 64 percent of both the Academy and comparison group graduates were enrolled in some type of school. This year, slightly more of the second cohort entered school: 67 percent of the Academy graduates and 68 percent of the comparison graduates. Meanwhile, fewer of the first cohort members are still in school: 53 percent of the Academy graduates and 60 percent of the comparison group members. None of these differences is statistically significant.

Last year, 63 percent of the Academy graduates were found to be working, compared with 71 percent of the comparison group members. This year's second cohort shows 69 percent of both groups are working. Meanwhile, 70 percent of the first cohort Academy graduates are now working, compared with 60 percent of the comparison group members. Again, none of these differences is statistically significant.

We added a new category to this year's report, those graduates who are both in school and working. Among second cohort members, 45 percent of Academy graduates are so engaged, compared with 44 percent of comparison group members. In the first cohort, 36 percent of Academy graduates are both in school and working, compared with 37 percent of comparison group members. There are no statistically significant differences here.

Across the three categories, there does appear to be a slight movement out of school between the first and second year after graduation. Also, slightly fewer of both groups are tackling both school and work by the second year. The proportion working stayed about the same for Academy graduates ( $70 \%$ ), while it declined by 9 percent for the comparison group members (to $60 \%$ ).

## Graduates In School

One subset of interview questions pertains to the graduates enrolled in some form of postsecondary education. There are many forms of schooling available, from one or two-year vocational programs to enrollment in full four-year colleges or universities leading to a baccalaureate degree. Table 4 shows the breakout of students in each category of schooling, while Table 5 shows the ambitions and eventual educational goals of graduates. Since the patterns for cohort one and two are very similar in these categories, their data have been combined for these presentations.

Table 4 shows that Academy and comparison graduates had very similar patterns of enrollment. Most enrolled students from both groups attend community college (73\% and $76 \%$ respectively). Figures are broken out for full-time and part-time students this year, more full-time students attend four-year colleges ( $20 \%$ ) than do part-time students ( $5 \%$ for Academy graduates, none for the comparison graduates). About two-thirds of all graduates in California who attend college go to community colleges, and about one-third
attend University of California, California State University, or private four-year colleges (CPEC data). None of the differences shown in Table 4 are statistically significant.

Table 4. For Those in School, Yype of School Attended (both cohorts)*

|  | Adult Night | Vocational Business | Community College | FourYear |
| :---: | :---: | :---: | :---: | :---: |
| High School |  |  |  |  |
| Bakersfield |  |  |  |  |
| Program (11) | 0\% | 18\% | 73\% | 9\% |
| Comparison Group (33) | 0\% | 9\% | 85\% | 6\% |
| Hiram Johnson |  |  |  |  |
| Program (18) | 0\% | 11\% | 84\% | 6\% |
| Comparison Group (12) | 0\% | 17\% | 84\% | 0\% |
| Mountain View |  |  |  |  |
| Program (7) | 0\% | 14\% | 86\% | 0\% |
| Comparison Group (16) | 0\% | 6\% | 63\% | 31\% |
| Independence |  |  |  |  |
| Program (33) | 3\% | 9\% | 73\% | 15\% |
| Comparison Group (29) | 3\% | 14\% | 55\% | 28\% |
| Silver Creek |  |  |  |  |
| Program (21) | 0\% | 10\% | 71\% | 19\% |
| Comparison Group (8) | 0\% | 0\% | 100\% | 0\% |
| Menlo-Atherton |  |  |  |  |
| Program (16) | 0\% | 13\% | 50\% | 38\% |
| Comparison Group (18) | 0\% | 0\% | 67\% | 33\% |
| Sequoia |  |  |  |  |
| Program (18) | 0\% | 6\% | 83\% | 11\% |
| Comparison Group (22) | 0\% | 5\% | 96\% | 0\% |
| Total |  |  |  |  |
| Program (124) | 1\% | 11\% | 73\% | 15\% |
| Comparison Group (138) | 1\% | 8\% | 76\% | 15\% |
| Full-Time Total |  |  |  |  |
| Program (85) | 0\% | 9\% | 71\% | 20\% |
| Comparison Group (106) | 0\% | 6\% | 74\% | 20\% |
| Part-Time Total |  |  |  |  |
| Program (39) | 3\% | 13\% | 80\% | 5\% |
| Comparison Group (32) | 3\% | 15\% | 82\% | 0\% |
| * Where rows fail to total $100 \%$, it is due to missing data and/or rounding |  |  |  |  |

Table 5 reports on the educational plans of those graduates enrolled in school. The correspondence between Academy and comparison group graduates is generally close, but

Table 5. Educational Plans of Those in School (both cohorts)*

|  | Vocational Certificate | Two-year Degree | Four-year Degree | Graduate Degree |
| :---: | :---: | :---: | :---: | :---: |
| Bakersfield |  |  |  |  |
| Program (10) | 0\% | 40\% | 60\% | 0\% |
| Comparison Group (32) | 9\% | 19\% | 50\% | 9\% |
| Hiram Johnson |  |  |  |  |
| Program (18) | 11\% | 11\% | $61 \%$ | 17\% |
| Comparison Group (11) | 0\% | 0\% | 64\% | $37 \%$ |
| Mountain View |  |  |  |  |
| Program (7) | 14\% | 14\% | 43\% | 29\% |
| Comparison Group (16) | 0\% | 13\% | 56\% | $31 \%$ |
| Independence |  |  |  |  |
| Program (35) | 3\% | 9\% | 74\% | 9\% |
| Comparison (29) | $3 \%$ | 7\% | 38\% | 38\% |
| Silver Creek |  |  |  |  |
| Program (21) | 0\% | 19\% | 57\% | 24\% |
| Comparison Group (8) | 0\% | 38\% | 63\% | 0\% |
| Menlo-Atherton |  |  |  |  |
| Program (15) | 13\% | 7\% | 60\% | 20\% |
| Comparison Group (17) | 0\% | 6\% | 47\% | 47\% |
| Sequoia |  |  |  |  |
| Program (18) | 11\% | 22\% | 50\% | $11 \%$ |
| Comparison Group (22) | 9\% | 9\% | 59\% | 18\% |
| Total |  |  |  |  |
| Program (124) | $7 \%$ | 15\% | 61\% | $15 \%$ |
| Comparison Group (135) | 4\% | 12\% | 52\% | 26\% |
| Total, in Degree Program |  |  |  |  |
| Program (82) | 6\% | 15\% | 63\% | 16\% |
| Comparison Group (87) | 4\% | 12\% | 50\% | 33\% |
| Total, Not in Degree Program |  |  |  |  |
| Program (36) | $8 \%$ | 14\% | 64\% | 14\% |
| Comparison Group (39) | 5\% | 13\% | 68\% | 15\% |
| *Where rows (or Ns) fail to total $100 \%$ it is due to missing data and/or rounding |  |  |  |  |

there are some differences. More Academy graduates plan on completing a four-year degree ( $61 \%$ versus $52 \%$ ), and when those not actually enrolled in a degree program are factored out, this difference enlarges to 63 percent versus 50 percent, suggesting that Academy graduates may have somewhat more realistic ambitions. These differences are not statistically significant. However, Table 5 shows a larger percentage of students in the comparison group plan to go on for a master's or doctoral degree, and this difference is statistically significant (for the total group, $z=2.18, p=0.03$; for those in degree programs only, $\mathrm{z}=2.56, \mathrm{p}=0.01$ ).

Other distinctions among those graduates enrolled in school include whether they are full- or part-time, and whether they are receiving financial aid. Table 6 provides a picture of the graduates in these respects. As this table shows, the pattern of Academy and comparison groups is again similar. Most students are full-time in both groups; each group averages about 15 hours per week in class. None of the differences in this table is statistically significant.

Table 6. For Those in School, Percent Time in School and Financial Aid

|  | Percent Full-time | Mean hours/ week in school | Receiving Financial Aid |
| :---: | :---: | :---: | :---: |
| High Schools |  |  |  |
| Bakersfield |  |  |  |
| Program (10) | 50\% | 13.9 | 30\% |
| Comparison Group (34) | 74\% | 16.3 | 18\% |
| Hiram Johnson |  |  |  |
| Program (18) | 72\% | 16.1 | 28\% |
| Comparison Group (12) | 83\% | 18.1 | 17\% |
| Mountain View |  |  |  |
| Program (7) | 86\% | 17.3 | 0\% |
| Comparison Group (16) | 100\% | 18.9 | 19\% |
| Independence |  |  |  |
| Program (35) | 72\% | 15.7 | 6\% |
| Comparison Group (29) | 66\% | 14.4 | 7\% |
| Silver Creek |  |  |  |
| Program (22) | 68\% | 14.0 | 18\% |
| Comparison Group (8) | 88\% | 13.3 | 0\% |
| Menlo-Atherton |  |  |  |
| Program (15) | 80\% | 13.4 | 27\% |
| Comparison Group (18) | 83\% | 15.5 | 44\% |
| Sequoia |  |  |  |
| Program (18) | 78\% | 13.3 | 11\% |
| Comparison Group (22) | 82\% | 12.0 | 5\% |
| Total |  |  |  |
| Program (125) | 72\% | 14.8 | 16\% |
| Comparison Group (139) | 80\% | 15.3 | 17\% |

## Working Graduates

There are many avenues through which students may secure jobs, ranging from school programs to public or private employment agencies, direct applications to employers, or through the help of relatives and friends. Table 7 shows the means by
which those graduates who were working gained their employment. While most graduates in both groups found work either through a relative or friend, or directly through an

Table 7. For Those Working, Means by Which Employment Was Obtained (both cohorts)*
$\left.\begin{array}{lcccc}\hline & & \text { Publ./Priv. } & \begin{array}{c}\text { Employer } \\ \text { Directly }\end{array} & \begin{array}{c}\text { Relative/ } \\ \text { Friend }\end{array} \\ \text { High_School } & \text { School } & & \\ \text { Agency }\end{array}\right]$
employer, more of the Academy graduates report finding their job through school (18\% versus $7 \%$ ), as opposed to relatives and friends ( $34 \%$ versus $48 \%$ ). These differences are statistically significant (for the first comparison $z=2.84, p=0.005$; for the second, $\mathrm{z}=2.42, \mathrm{p}=0.016$ ). This suggests that the Academies are providing extra help in placing program graduates in jobs.

We also examined the number of hours per week graduates were working, and their starting and current wages. These figures are presented in Table 8. As this table shows, Academy graduates were working on average about three and a half more hours per week

Table 8. Mean Hours Worked per Week, Hourly Wages, for All Working Graduates (both cohorts)

|  | Mean hours Worked | Mean starting Wages | Mean current Wages |
| :---: | :---: | :---: | :---: |
| High_School |  |  |  |
| Bakersfield |  |  |  |
| Program (14) | 27.1 | \$4.89 | \$5.40 |
| Comparison Group (30) | 26.4 | \$4.68 | \$5.19 |
| Hiram Johnson |  |  |  |
| Program (24) | 30.9 | \$4.95 | \$5.75 |
| Comparison Group (11) | 28.9 | \$5.58 | \$6.32 |
| Mountain View |  |  |  |
| Program (7) | 36.4 | \$5.48 | \$6.33 |
| Comparison Group (15) | 30.0 | \$5.93 | \$7.64 |
| Independence |  |  |  |
| Program (27) | 33.8 | \$6.04 | \$6.43 |
| Comparison Group (28) | 29.5 | \$6.79 | \$7.28 |
| Silver Creek |  |  |  |
| Program (24) | 31.8 | \$6.61 | \$7.18 |
| Comparison Group (9) | 27.2 | \$6.08 | \$6.70 |
| Menlo-Atherton |  |  |  |
| Program (13) | 25.8 | \$6.00 | \$6.88 |
| Comparison Group (11) | 24.3 | \$6.50 | \$7.13 |
| Sequoia |  |  |  |
| Program (23) | 33.3 | \$6.09 | \$7.43 |
| Comparison Group (23) | 28.9 | \$5.60 | \$7.83 |
| Total |  |  |  |
| Program (132) | 31.5 | \$5.82 | \$6.57 |
| Comparison Group (127) | 27.9 | \$5.75 | \$6.75 |

than comparison graduates ( 31.5 hours versus 27.9). This difference is statistically significant ( $t=2.48, p<0.02$ with 254 degrees of freedom, adjusted for unequal variances). Another significant difference, which does not appear in a table, relates to whether graduates are working in jobs "related to any specialized courses you took in high
school." Among June 1989 graduates 55 percent of the Academy graduates fall into this category, compared with 28 percent of the comparison group graduates. This finding is important in the sense that Academy graduates seem to be following a more coherent career path. There are no significant differences in hourly earnings.

## Program Ratings and Feedback

At the end of the interview respondents were asked to reflect on their high school experience and assess how well their courses prepared them for the work or schooling they were now doing. They were also asked to rate themselves on how well they were doing since graduation. Table 9 summarizes the feedback related to these questions. As this table shows, the patterns of response are very similar between the Academy and comparison group students, with no statistically significant differences. The ratings are generally favorable, averaging about a 2.0 , indicating graduates are "fairly well" satisfied with both their high school preparation and achievements since graduation.

Table 9. Graduates Ratings of "How Well Prepared" and "How Well Doing" (both cohorts) ( $1=$ extremely well; $5=$ very poorly)
How well How well prepared doing
High School
Bakersfield
Program (23)
1.71.9
Comparison group (50) 1.8 ..... 2.0
Hiram Johnson
Program (30)2.41.9
Comparison Group (22) ..... 2.5 ..... 2.0
Mountain View
Program (12)
Comparison group (25) ..... 2.3 ..... 1.82.31.7
Independence
Program (40)2.01.5
Comparison Group (41) ..... 2.4 ..... 1.8
Silver Creek
Program (37)2.12.0
Comparison Group (12) 2.5 ..... 2.0
Menlo-Atherton
Program (21) ..... 2.12.0
Comparison Group (22) ..... 2.4 ..... 1.7
Sequoia
Program (34)2.22.0
Comparison Group (28) ..... 2.4 ..... 1.8
Total
Program (197) ..... 2.1
1.8
Comparison group (200) ..... 2.2 ..... 1.9

## RELATED RESEARCH

## San Diego Graduates

One way to verify the validity of these data is to compare them with other surveys of graduates. Such surveys, unfortunately, are not easy to come by. However, one district that has put considerable effort into tracking its graduates is San Diego, which has published a series of reports on the status of its 1984 graduating class. While these data pertain to a period about five years earlier than that focused on here, from a different part of the state, and include a cross section of all district graduates, they do offer some useful comparisons.

The San Diego report of most interest is the one published in 1987, reporting on the second-year follow-up of the full class of June 1984 graduates, conducted in April 1986, 22 months after graduation. This report, issued by the San Diego City Schools Division of Planning, Research, and Evaluation, is entitled "Graduate Follow-Up Study, Phase Two: San Diego City Schools' Class of 1984 Two Years After Graduation" (April, 1987). It contains data roughly comparable in "time since graduation" as the Academy second-year follow-up survey. In addition, it presents comparisons with results from the first-year survey, which was conducted approximately eight months after students' graduation.

Not all the data from these San Diego surveys are presented in formats parallel with those used in this report. But there is enough commonality that, with some adjustments, meaningful comparisons can be made. Table 10 presents the general findings from the two studies. Academies figures combine Academy and comparison group data, since these are in most cases similar. All figures are in percent of the entire cohort.

This table shows many similarities between the Academy/comparison group graduates and those from the San Diego schools. In most respects, the Academy graduates' behavior parallels that of the entire class of 1984 from San Diego. Comparable percentages attend college after graduating, both full time and part time. Somewhat more Academies graduates do work the first year, particularly in part-ime jobs.

Table 10. Comparisons of Graduate Responses Between this Study and Those of San Diego City 1984 High School Graduates

|  | San Diego |  | Academies |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 st Year | 2nd Year | 1st Year | 2nd Year |
| In School | 69\% | 61\% | 68\% | 56\% |
| Full time | 55\% | 50\% | 51\% | 42\% |
| Part time | 14\% | 11\% | 16\% | 14\% |
| Four-year college | 32\% | 31\% | 10\% | 7\% |
| Community college | 32\% | 27\% | 53\% | 41\% |
| Vocational/technical school | 4\% | 3\% | 4\% | 8\% |
| Working | 55\% | 71\% | 69\% | 66\% |
| Full time | 20\% | 38\% | 24\% | 30\% |
| Part time | 35\% | 33\% | 46\% | 36\% |
| Both School and Work | 32\% | 38\% | 44\% | $36 \%$ |
| In the Military | $3 \%$ | 2\% | $3 \%$ | 8\% |
| Neither School nor Work | 10\% | 4\% | 4\% | 3\% |

There are also differences between the two groups. Substantially more of the San Diego graduates attend four-year colleges ( $32 \%$ versus $10 \%$ ), while more of the Academy/comparison group graduates attend two-year colleges (53\% versus 32\%). After the first year, fewer of the Academies graduates remain full-time students. In fact, less than 10 percent are following the traditional "college" route of full-time four-year college attendance through even two years, while for the San Diego group almost a third seem so directed. This reflects the Academy groups' original selection criterion as at-risk, non-college-bound students.

The proportion of graduates working increases substantially the second year for the San Diego group (to $71 \%$ ), while for the Academy group it tails off a little (to 66\%). For both groups the proportion working full-time increases, although this is a more substantial gain for the San Diego graduates ( $18 \%$ jump, to $38 \%$, versus a $6 \%$ jump for Academy
graduates, to $30 \%$ ), while the proportion working part-time declines (to roughly one-third for both groups). While more Academy graduates both worked and attended school the first year, this proportion falls off to roughly the same as the San Diego graduates the second year, about a third of the cohort. Somewhat more Academy graduates enter the military by the second year. The first year, over twice the proportion of San Diego graduates are doing "none of the above" ( $10 \%$ versus $4 \%$ ); this proportion drops to near the Academy figure the second year.

In general, these San Diego data present a parallel to the patterns of behavior found among Academy/comparison group graduates. The differences found between the two also seem credible. The biggest difference is in the larger proportion of San Diego graduates attending four-year colleges. Again, fewer Academy graduates would be expected to follow this course, given their original selection criteria. Indeed, the fact that they come so close to matching the San Diego graduates in other respects can be regarded as a positive outcome of the program.

## Peninsula Academies Graduates

Another study with bearing on this one was conducted in the mid 1980s. It entailed a survey of the graduates of the Peninsula Academies, the model on which the Partnership Academies is based. It used the same methodology as this study, tracking both Academy and comparison group graduates. A report on this survey was issued by the American Institutes for Research in 1987 and was entitled "A Longitudinal Study of the Graduates of the Peninsula Academies," by Dorothy Reller.

The Peninsula Academies operate in the Sequoia Union High School District located in Redwood City, California,located on the peninsula south of San Francisco, just north of Palo Alto. It is at the north end of the "Silicon Valley," and much of the business support for the program comes from high tech companies located here. The Peninsula Academies offer training in either computers or electronics.

This study suffered from a small sample of respondents, particularly among the first class examined (June 1984 graduates), where only 32 Academy graduates and 11 comparison group graduates were involved. However, in other respects it provides a meaningful benchmark against which to examine the findings of this study. It surveyed the

June 1984 graduates at three points in time-3, 15, and 27 months after graduation-and the June 1985 graduates once, 15 months after graduation.

The study's findings include the following (all direct quotes):

- Overall, the findings of the longitudinal study indicate that the Academy and comparison groups were doing equally well on several measures of employment and educational achievement.
- Employment rates, hours worked, and earnings were about the same for Academy and comparison graduates.... ...about 90 percent of all respondents who were actively in the job market were employed.
- While 80 percent of the Academy and only 70 percent of the comparison respondents had taken post-secondary courses, no significant differences were found at the time of the surveys between the educational activities of the two groups.
- No significant differences were found on any measures between the responses of minority and non-minority respondents.... In both the Academy and comparison groups, females were earning about a third less than males....
- The Academy graduates' ratings of the preparation they received in high school were significantly higher than those of the comparison group.
- Academy graduates had jobs that required more technical skills than they probably would have had without the program.
- To a greater extent than the comparison group, Academy graduates made longrange career plans and were helped by the program to find relevant entry-level work.

Most of these findings parallel those of the current study. Exceptions are the differences found in favor of Academy graduates concerning (1) their higher ratings of the preparation they received in high school, (2) their more technical jobs, and (3) their more extensive long-range career plans. The current study showed equal ratings of high school preparation between Academy and comparison group graduates. While the technical nature of jobs was not examined as such, more Academy graduates did report a greater correspondence between their jobs and high school training. The third question was examined in the context of long-range school ambitions, where differences favored Academy graduates, but were not statistically significant.

The Peninsula Academies report emphasizes the lack of high school dropouts in the survey (which is true of the present study). In both cases, this choice was made deliberately, due to the difficulty of locating dropouts and gaining their cooperation, and in
order to gain a meaningful estimate of the program's effects (which accrue over three years). In the words of the previous study, "This study design may underestimate the positive effects of the Academy program, since it does not take into account the possibility that without the program, the Academy students might have become dropouts, and it does not examine the experiences of the students who did drop out." This is a valid point concerning the current study that was discussed earlier.

## CONCLUSIONS

With a few exceptions, Academy and comparison group graduates surveyed in this study are following parallel courses after they graduate. Specifically:

- About two-thirds of both groups are enrolled in school the first year after graduation, a figure which drops somewhat the second year, but remains above half;
- About two-thirds of both groups are also working the first year after graduation, a figure which holds steady the second year for Academy graduates and drops slightly for comparison graduates;
- About four-fifths of those in school from both groups attend community colleges;
- More Academy graduates plan on earning a four-year degree ( $61 \%$ versus $52 \%$ ), a disparity that widens among those actually enrolled in a degree program (63\% versus $50 \%$ ); in contrast, slightly more comparison graduates plan on earning a graduate degree ( $26 \%$ versus $15 \%$ );
- About three-fourths of enrolled students attend school full time from both groups;
- While most of those working found their jobs either through a friend or relative, or directly through an employer, a significantly larger fraction of Academy graduates got help from their high school in this respect ( $18 \%$ versus $7 \%$ );
- Academy graduates who are working put in an average of about three and a half more hours per week; this difference is statistically significant, but there is no significant difference in hourly earnings;
- Significantly more Academy graduates are working in jobs related to their high school training ( $55 \%$ versus 28\%);
- Both Academy and comparison group graduates rate their high school preparation and how they are doing currently as "fairly well" (next to the top rating on a fivepoint scale).

Most of the questions examined in the study showed no statistically significant differences between the Academy and comparison group graduates.

Comparisons with data from the entire graduating class of 1984 from the San Diego City Schools show many parallels to the findings here. The San Diego graduates are more frequently enrolled in four-year degree programs ( $32 \%$ versus $10 \%$ ), while the Academy/comparison group graduates are more often enrolled in community colleges (53\% versus $32 \%$ ). Otherwise post-graduate behavior of the two groups is largely similar.

A comparison is also presented with a survey of Academy and comparison group graduates from the 1984 and 1985 classes of the Peninsula Academies, the model on which the Partnership Academies is founded. This also shows many similarities. Employment and education outcomes are quite parallel to those found here, with few significant differences between Academy and comparison group graduates. The differences favoring the Academy graduates that were found in the earlier study include that the graduates were working in jobs requiring more technical skills than their comparison group counterparts, and rated their high school preparation more highly.

Given the pattern of differences found in high school performance between program and comparison group students year after year in examinations of both the Partnership Academies and the Peninsula Academies, it is somewhat puzzling to find so few differences in these graduate surveys. While all significant differences that are found favor the Academy graduates, these are the exception rather than the rule. There are several possible explanations.

One explanation is that of technical limitations in either the survey design or its implementation. The fact that the survey includes only high school graduates, when there is an established lower dropout rate among Academy participants than comparison group members, is one possible source of such error. This was discussed earlier. Another source of concem is the response rate, which leaves at least some imprecision whenever it is less than 100 percent. It was lower this year than last, and this may have introduced some bias. A third possible problem is "noise" in the data we do have, which is particularly strong concerning the variables of "hours worked" and "hourly wages." This makes it difficult to conduct precise statistical analyses, and may mask real differences that exist.

Another possible explanation is that while Academies have measurable impact during high school, this impact either weakens or disappears at the point of graduation. Since Academy programs typically include a fairly intensive set of activities, and these cease to operate at the point of graduation, it would seem sensible to expect some weakening of effect at this time. The general lack of differences among graduates does not detract from the evidence of in-school effects, which have been shown repeatedly. Perhaps these simply do not carry over, at least in a way that is measurable, after high school.

A third possible explanation is that we are looking for the wrong kind of evidence of post-graduate program effects. It may be that such effects exist but cannot be found in simple measures such as college enrollment and employment rates. Some of the differences that did appear suggest this explanation. For example, the lower dropout rate among Academy participants, and the higher percentage of graduates working in jobs for which they received some training in high school, suggest a more coherent life pattern. In the case of the Peninsula Academy graduates, more of whom are working in skilled technical jobs, it suggests significant help in entering companies and fields with long-term career possibilities that would not have been open to these students without the program. Such differences may appear in other ways than those we attempted to measure, or further away from graduation.

Meanwhile, it is important to recognize that the absence of major advantages for Academy students after they graduate from high school does not signify failure of the Academy programs. Previous evaluations have demonstrated that Academy students perform better in high school, and are more likely to graduate, than students in the comparison groups. The fact that Academy graduates are doing equally well as comparison students in the first year or two after graduation indicates that this gain in performance during high school was not obtained merely by lowering standards or diluting the curriculum in Academy programs. There is no evidence that Academy graduates are viewed as holding second-rate diplomas, or that Academy programs have achieved higher graduation rates at the expense of lower success rates after high school.

City: $\qquad$ Program Student $\qquad$ Comparison Group

Graduate's Name: $\qquad$

Address:
(Street, city, state, zip code)
Telephone \#: $\qquad$ Date \& Time: $\qquad$
Hello, may I speak with (name of graduate)? This is (name of interviewer) from (Foothill Associates: UC Berkeley). We are conducting a survey of last year's graduates from (name of high school) to find out what they are doing now. The questions should take about five minutes. Is now a good time to do this? (If this is not a good time, set up another time to call. If this is the wrong telephone number, try to obtain a current one).

1. Is this telephone number and address still the best way to reach you?
_ 1. Yes
2. No

If "no," write in the new ones:
Address: $\qquad$
Phone \#: $\qquad$
2. Did you receive your high school diploma or a GED certificate? (Check one)
$\qquad$ 1. Diploma $\qquad$ 2. GED certificate $\qquad$ 3. Neither
3. What are you doing now? Are you: (Read list; check all that apply)

1. Going to school? __Yes ___No If yes, complete Section A.
2. Working? $\qquad$ Yes $\qquad$ No If yes, complete Section B.
3. In the military? Yes $\qquad$ If yes, complete Section C.
4. Not working or in school? $\qquad$ Yes $\qquad$ No If yes, complete Section D.
5. Other? (describe):
$\qquad$
$\qquad$

COMPLETE ALL APPLICABLE SECTIONS FOR EACH RESPONDENT COMPLETE SECTION E FOR ALL RESPONDENTS

## SECTION A GOING TO SCHOOL

4. What is the name of the school you are currently attending? (Write in)
5. What kind of school is this? (Check one)
_ 1. Adult or night school program

- 2. Vocational, trade, business or other career training school
_ 3. Junior or community college (2-year)
_ 4. College or university (4 years or more)
- 5. Other (write in):

6. Are you planning to receive a degree or are you taking courses not related to any degree program? (Check one)
$\qquad$ 1. Degree $\qquad$ 2. Courses not related to a degree
7. Are you focusing on a particular field? $\qquad$ 1. Yes 2. No

If "yes," what field:
Is this related to any specialized courses you took in high school?
$\qquad$ 1. Yes
2. No
8. As things stand now, how far in school do you think you will get? (Check one. If unsure, check the respondent's one best guess)
_ 1. High school graduation only

- 2. Less than two years of vocational, trade, or business school

3. Two years or more of vocational, trade, or business school
4. Less than two years of college
5. Two or more years of college (including two-year degree)
6. Finish college (four- or five-year degree)

- 7. Master's degree or equivalent
- 8. Ph.D, M.D., or other advanced professional degree

9. During the last month, were you classified as a full-time student? (Check one)
_1. Yes $\qquad$ 2. No
__ 3. Don't Know
10. During the last month, about how many hours a week were your classes scheduled to meet? (Include lectures, shop, lab time, etc. Write in total.)

Hours per week: $\qquad$
11. Are you currently receiving financial aid? (Check one)
__ 1. Yes __ 2. No If "yes," in what form:

## SECTION B WORKING

12. What kind of job or occupation do you have? (e.g., teller, clerk, etc.)

Write in: $\qquad$
13. What kind of business or industry is this job in? (e.g., bank, retail store)

Write in: $\qquad$
14. Is this job related to any specialized courses you took in high school?
$\qquad$ 1. Yes
2. No
15. If you are now enrolled in school, is your job related to what you are studying in school?
$\qquad$ 1. Yes
2. No
3. NA
16. What are your main activities or duties on this job? (e.g., filing, typing)

Write in: $\qquad$
17. On this job are you: (check one)
_ 1. An employee of a private company
__ 2. A government employee (federal, state, local)

- 3. Self-employed in your own business
__ 4. Working without pay in a family business
___ 5. Working without pay in a volunteer job

18. When did you start this job? (month/day/year)
19. How did you find this job? (Check the main method used)
20. School placement service (Specify: $\qquad$
21. Public employment service
22. Private employment agency
23. Newspaper advertisement
24. Checked with employer directly
25. Through a relative
26. Through a friend
27. Civil Service application
28. Union Registration
29. Other (Write in:
30. How many hours a week do you usually work in this job? $\qquad$
31. What was your gross starting hourly salary before any deductions on this job? Average in any tips or commission. Estimate if not sure.
32. What is your gross hourly salary now? \$ $\qquad$ /hr.
33. Is your current job the sort you were planning for in high school?
$\qquad$ 1. Yes
34. No $\qquad$ 3. Had no plans in high school
35. Are there skills you wish you had acquired in high school, that would help you in your job?
__1. Yes $\qquad$ 2. No If "Yes," what are they: $\qquad$

## SECTION C

MILITARY
(O.K. to obtain this information from relative)
25. What branch of the service are you in? (Check one)
_ 1. Army
__ 4. Coast Guard

- 2. Navy
- 5. Marines
- 3. Air Force

26. Are you on active duty or reserve status? (Check one)
_ 1. Active duty
27. Reserve Status
28. If on active duty, when did you begin this: $\qquad$
29. When will you be discharged:
(month, year)

## SECTION D

## NOT WORKING OR IN SCHOOL

29. What is the main reason you are not working or in school now?
30. Are you looking for work? (Check one)
_ 1. Yes, I am looking for full-time work

- 2. Yes, I am looking for part-time work
-3. No, I am not looking for work
If "yes," what kind of job are you seeking:

31. When you were in high school, did you plan to go to college?

> _ 1. Yes __ 2. No If "yes," why did you decide not to go
to college: $\qquad$
$\qquad$

## SECTION E FINAL QUESTIONS

32. As you look back over your high school experience, how well do you think your courses prepared you for the work or schooling you are now doing? (Check one)

- 1. Extremely well
—4. Not very well

2. Fairly well 5. Very poorly
3. How would you rate yourself on how well you are doing since graduation? (Check one)1. Very well
4. Not very well
5. Fairly well 5. Very poorly

> 3. So-so
34. If there is one message you would like to give to current high school students, what would it be?

Thank you for your participation. I have enjoyed talking with you.

## RELATED REPORTS

Bell, P. Graduate Follow-Up Study: Phase II. San Diego City Schools' Class of 1984 Two Years After Graduation (San Diego, CA: Planning, Research, and Evaluation Division, San Diego City Schools, 1987).

Dayton, C. \& D. Stern. Graduate Follow-up Survey of the June 1988 Graduates of the California Partnership Academies (Berkeley: Policy Analysis for California Education [PACE], 1990).

Dayton, C. "Jobs for the Disadvantaged," Graduate Follow-up Survey (Berkeley: Policy Analysis for California Education [PACE], 1988)..

Dayton, C. Looking Back: Program Successes and Evaluations Under "Jobs for the Disadvantaged" (Berkeley: Policy Analysis for California Education [PACE], 1988).

Dayton, C., \& A. Weisberg. (1987) School-to-Work and Academy Demonstration Programs: 1986-87 Evaluation Report (Berkeley: Policy Analysis for California Education [PACE], 1987).

Dayton, C., A. Weisberg, \& D. Stern. California Partnership Academies: 1987-88 Evaluation Report (Berkeley: Policy Analysis for California Education [PACE], 1989).

Reller, D.. A Longitudinal Study of the Graduates of the Peninsula Academies (Palo Alto, CA: The American Institutes for Research, 1987).

Stern, D., C. Dayton, I. Paik, \& A. Weisberg. "Benefits and Costs of Dropout Prevention in a High School Program Combining Academic and Vocational Education: Third-year Results from Replications of the California Peninsula Academies," Educational Evaluation and Policy Analysis, 11(4), 1989, 405-416.

Stern, D., C. Dayton, I. Paik, A. Weisberg, \& J. Evans. (1988) "Combining Academic and Vocational Courses in an Integrated Program to Reduce High School Dropout Rates: Second-year Results from Replications of the California Peninsula Academies," Educational Evaluation and Policy Analysis 10(2), 1988, 161-170.

