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ABSTRACT

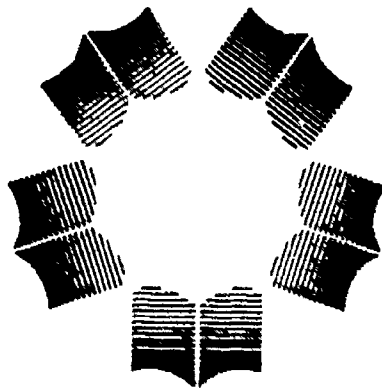
Each year a study is conducted at Prince George's Community College (PGCC) to update student outcomes data using quantifiable measures of student achievement. Data for the 1991 study were obtained from Maryland state databases, the University of Maryland (UM) system, and surveys of all fiscal year (FY) 1989 graduates. Of the 897 Associate of Arts (A.A.) degree or certificate recipients surveyed, 427 responded. Study findings included the following: (1) 89% of the FY 1989 graduates were employed, and 59% of the employed graduates were working in a field related to their PGCC major; (2) 90% of the 1989 graduates of PGCC nursing and allied health technology programs were employed in related field, compared to only 59% of the criminal justice and paralegal studies graduates; (3) within the three occupational programs with less than 80% job placement rates, over 33% of the students were continuing their education; (4) 45% of the respondents had taken courses at another college since graduating; (5) nearly 75% of the PGCC students who transferred to a four-year institution did so without earning a degree from PGCC; (6) two-thirds of the graduates of transfer programs were attending a four-year institution within a year of graduation; (7) less than 20% of the students starting their college careers as full-time students at PGCC had graduated from the college within four years of entry; and (8) of the 2,081 fall 1990 entering PGCC students who took the reading, writing, and math sections of the Comparative Guidance and Placement test, 60% needed remediation in at least one area. Data on the grade point averages of transfer students at specific four-year institutions in Maryland, and data tables indicating the educational background of the entering 1990 cohort are included. (GFW)

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STUDENT OUTCOMES

Annual Summary Report to the Board of Trustees



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Craig A. Clagett

Report BT91-3

April 1991

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PRINCE GEORGE'S COMMUNITY COLLEGE
Office of Institutional Research and Analysis

STUDENT OUTCOMES ANNUAL SUMMARY REPORT
Report to the Board of Trustees BT91-3
April 1991

Introduction

The 1988 Reorganization of Maryland Higher Education Act directed the Maryland Higher Education Commission to establish accountability guidelines and reporting schedules for all state public colleges and universities. The Commission has defined the assessment of student learning outcomes as a key component of accountability. On June 1, 1991, each institution is to submit an assessment plan to measure student learning outcomes. Beginning November 1, 1991, each governing board is to provide the Commission annual student assessment status reports.

On February 19, 1991, the Commission adopted Guidelines for the Assessment of Student Learning Outcomes to assist in the preparation of the individual campus assessment efforts. After a discussion of fundamental principles of assessment, the Guidelines specified a number of indicators of student learning that are mandatory components of the assessment plans. For community colleges, these include retention, transfer, and graduation rates; trends in grade point averages; effectiveness of the general education program; students' evaluation of teaching; academic performance of transfer students in baccalaureate programs; student performance on licensing and certification examinations; findings from graduate follow-up surveys, including employment rates of graduates; employer satisfaction with graduates' preparation; and external evaluations of student performance by professional accrediting bodies. In addition to these mandated indicators, several others were suggested, with results of basic skills proficiency exams in English and mathematics being one particularly pertinent to community colleges.

This report presents selected student outcomes information shared with the Board of Trustees at their Spring 1991 retreat. It is in response to an earlier Board request for a briefing on "how our graduates are doing" as well as to the need for background material for preparing the College's response to the MHEC mandates.

Findings from a Survey of the College's FY89 Graduating Class

The Board specifically asked for information concerning the post-PGCC status of the College's graduates. The most recent class for which follow-up information was available was the graduates of

FY89: students receiving an award from the College between July 1, 1988 and June 30, 1989. In spring 1990, the research office conducted a survey of all 897 recipients of A.A. degrees or certificates awarded during FY89.

What percentage of the graduates were employed?

Nine out of ten FY89 graduates were working in paid employment when surveyed. Fifty-nine percent of the employed graduates were working in jobs substantially related to their PGCC program. Full-time workers were more likely (at 63 percent) to be working in a related field than part-time workers (35 percent employed in jobs related to their college program). The unemployment rate, or percent of respondents unemployed and seeking a job, was 4 percent. The employment status of PGCC graduates from the last three classes surveyed follows:

Employment Status of PGCC Graduates, FY87-89
Surveys Conducted One Year After Graduation

	<u>1987</u>	<u>1988</u>	<u>1989</u>
Employed full-time	78%	71%	76%
Employed part-time	12	18	13
Unemployed, not seeking a job	7	6	7
Unemployed and seeking a job	3	5	4
Total respondents (100%)	522	402	427

When did the employed graduates obtain their jobs?

Forty-six percent of the FY89 graduates obtained their jobs after they graduated from PGCC. Ten percent had their jobs before enrolling at the College. Forty-four percent of the respondents obtained their jobs while they were enrolled at PGCC. Over half said their PGCC program helped them get their job; three-fifths said completing their program helped them qualify for a raise or promotion.

Where were the employed graduates employed?

Forty-one percent of the graduates were employed in Prince George's County. Thirteen percent were working in other Maryland jurisdictions. A third of the respondents were working in the District of Columbia. Eleven percent were employed in Virginia, with the remaining two percent employed outside the area.

Which programs had the highest rates of related employment?

Graduates of health technology programs continued to have the greatest success in finding related employment. As in past surveys, nine of ten nursing and allied health graduates were working in related positions within a year of commencement. All of the FY89 graduate respondents in radiography, medical records, respiratory therapy, and nuclear medicine had related jobs:

**Related Employment Rates of Career Program Graduates
by Selected Program Areas, Class of 1989**

	<u>Respondents</u>	<u>Employed in Related Job</u>			<u>Percent</u>
		<u>FT</u>	<u>PT</u>	<u>Total</u>	
Allied Health	17	16	1	17	100%
Nursing	35	29	4	33	94%
Engineering Tech.	15	12	0	12	80%
Crim. Just./Paralegal	46	27	0	27	59%
Computer Technologies	36	18	2	20	56%
Business/Management	105	53	1	54	51%

The program areas with less than 80 percent of their graduates employed in related jobs all had over a third of their graduates continuing their education. Thirty-seven percent of the career business program graduates were continuing their education in a related program at a senior institution. The related-transfer rate for computer technology graduates was 36 percent; for criminal justice and paralegal graduates, 35 percent.

What percentage of the FY89 graduates had transferred?

Forty-five percent of the graduates responding had taken courses at another college since graduating from PGCC. Over three-fourths of the PGCC transfers were enrolled in programs related to their community college program. Three schools enrolled three-fourths of the PGCC transfers: University of Maryland University College (33 percent of the transfers), University of Maryland College Park (31 percent), and Bowie State University (12 percent).

Which programs had the highest rates of transfer?

Two-thirds of the respondents who had graduated from PGCC transfer programs had transferred within a year of graduation. Though they had few graduates responding, engineering and computer science programs had the highest rates of transfer:

Transfer Rates, FY89 Graduates of PGCC Transfer Programs

	<u>Respondents</u>	<u>Transferred to Senior College</u>			<u>Percent</u>
		<u>FT</u>	<u>PT</u>	<u>Total</u>	
Engineering	2	1	1	2	100%
Computer Science	7	1	5	6	86%
Business Admin.	35	17	7	24	69%
Gen Studies/Teach Ed.	84	45	12	57	68%
Arts & Sciences	12	3	2	5	42%

The seven Arts and Sciences program graduates who did not transfer included two retirees who earned Music degrees and three Art graduates who highly recommended PGCC's program.

A Further Look at Transfer to Senior Institutions

Nearly three-fourths of the PGCC students who transfer do so without first earning an award from the College. Thus looking only at the transfer performance of PGCC graduates misses most of the transfer activity. A better assessment of transfer follows the careers of an entering cohort of students over time. This can be done by analysis of state reporting systems data or by surveys. State reporting systems, by matching student identification numbers across all institutional enrollment files, permit the accurate determination of the number of students transferring to schools within Maryland over selected terms. However, students transferring to schools outside of Maryland are missed so transfer is underestimated. Surveys of students overcome this limitation, but introduce another problem: low response rates and their attendant bias. Surveys of entering classes conducted several years after entry, as most studies of outcomes entail, typically have this problem to a greater degree than surveys of recent graduates. Weighting procedures can mitigate the potential bias to some degree.

What percentage of PGCC students transfer?

One source of information for estimating the transfer rate of PGCC students was a survey of Fall 1984 entrants conducted jointly in spring 1988 by the State Board for Community Colleges and the Maryland Community College Research Group. Since the survey was a collaborative one, data for peer colleges as well as statewide averages were available to help place individual college findings in context. The survey design included collection of college-provided data from campus databases in addition to the questionnaire responses, enabling a more comprehensive analysis.

The transfer rate for all Fall 1984 PGCC first-time entrants was 27 percent, near the statewide rate of 28 percent (based on weighted responses). Transfer rates for selected student subgroups were as follows:

Transfer Rates of Fall 1984 Entrants Four Years After Entry

	<u>PGCC</u>	<u>State</u>
All 1984 entrants	27%	28%
Students completing at least 12 credit hours at initial community college	30%	36%
Who attended full-time	46%	44%
In transfer program	53	50
Full-time in transfer program	60	60
Had transfer goal	65	63
Full-time with transfer goal	73	69
FT, transfer goal and program	74	72
Graduates of community college	59%	52%
From transfer programs	73%	71%
With transfer goal	79	79
Transfer program and goal	77	82

As can be seen, answering the question "what percentage of students transfer?" depends on several definitional decisions. Findings based on the weighted responses to this survey of entering students after four years ranged from a little over a quarter of all students to four out of five transfer program graduates who had transfer goals. Of course, as the definition is further restricted, the number of student responses the rate is based on declines. For PGCC, the rate for all 623 respondents was 27 percent. The 77 percent rate for transfer program graduates who had initial transfer goals reflected the experience of only 18 students.

Where do PGCC students transfer?

Most PGCC students who transfer remain within Maryland. State reporting systems reveal that four-fifths of the PGCC students transferring within Maryland enroll at the University of Maryland College Park, the University of Maryland University College, or Bowie State University. All three are located within Prince George's County. A second tier of three schools attracts most of the remaining PGCC transfers: Salisbury State University, Towson State University, and the University of Maryland Baltimore County:

**PGCC Transfers to Maryland Senior Colleges and Universities
from MHEC Fall-to-Fall Enrollment Matrices**

	<u>84-85</u>	<u>85-86</u>	<u>86-87</u>	<u>87-88</u>	<u>88-89</u>
UMCP	487	457	434	376	427
UMUC	279	223	277	272	267
Bowie	72	73	58	98	110
Salisbury	16	24	27	26	46
Towson	63	58	42	70	43
UMBC	31	38	41	41	39
Frostburg	14	24	26	15	14
UMES	10	12	8	13	11
Morgan	3	13	7	11	11
U. of Balt.	5	3	3	2	9
UMAB	7	11	10	8	8
St. Mary's	10	15	7	12	5
Coppin	0	1	0	0	0
Total	997	952	940	944	990

SOURCE: Maryland Higher Education Commission. Numbers represent students enrolled at PGCC the first fall who appeared on the enrollment tapes of the senior institution the following fall. Thus 487 students enrolled at PGCC in Fall 1984 were enrolled at the University of Maryland College Park in Fall 1985.

How well do PGCC transfers do at senior institutions?

While the College does not receive feedback on the performance of students who have transferred to private or out-of-state colleges and universities, the University of Maryland System's Office of Academic Affairs has compiled information about the academic performance of community college transfers to most UMS campuses as of the end of the Spring 1990 semester. In most cases, this consisted of grouped grade point average data for students entering a UMS campus in Fall 1988 and 1989. For the University of Maryland College Park and the University of Maryland at Baltimore, information for a few prior fall entering cohorts was also reported. The University of Maryland Baltimore County provided means rather than grouped frequencies. No data were reported for the University of Maryland Eastern Shore or University College. PGCC had no transfers to Coppin State University in Fall 1988 or 1989 who were still enrolled in Spring 1990. The following sections present the data on PGCC transfer performance provided by the UMS office for each UMS campus.

University of Maryland College Park

College Park is the most popular transfer school for PGCC students, attracting between 30 and 45 percent of all PGCC students transferring each year. Four-fifths of the PGCC students entering UMCP in Fall 1989 and enrolled in Spring 1990 had grade point averages of 2.0 and above as of the end of the spring term:

PGCC Transfers at the University of Maryland College Park GPAs of Fall UMCP Entrants at the End of Spring 1990

Entering Term	Entered in Fall	Enrolled Spr 90	Cumulative GPA after Spring 1990			
			<1.0	1.0-1.9	2.0-2.9	3.0-4.0
Fall 1989	275	231	-	36	129	57
Fall 1988	198	115	0	8	68	39
Fall 1987	281	97	0	5	57	35
Fall 1986	285	48	0	3	31	14
Fall 1985	288	24	0	0	14	10

The Spring 1990 enrollment numbers give some indication of retention at UMCP, although without degree attainment information interpretation is problematic. Eighty-four percent of the Fall 1989 transfers continued their studies at UMCP the following spring. Fifty-eight percent of the PGCC transfers entering UMCP in Fall 1988 were enrolled in Spring 1990.

Bowie State University

Bowie State University has consistently been the third most popular choice for PGCC transfer students, trailing only UMCP and University College. The number of PGCC students transferring to Bowie has been increasing in recent years. PGCC students have generally done well at Bowie. Nearly two-fifths of the Fall 1989 entrants earned grade point averages of 3.0 and above:

PGCC Transfers at Bowie State University GPAs of Fall Entrants at the End of Spring 1990

Entering Term	Entered in Fall	Enrolled Spr 90	Cumulative GPA after Spring 1990			
			<1.0	1.0-1.9	2.0-2.9	3.0-4.0
Fall 1989	77	69	1	7	34	27
Fall 1988	50	36	0	3	14	19

Towson State University

Largest in enrollment among Baltimore's institutions of higher education, Towson State University annually ranks among the top five destinations of PGCC transfer students. Status as of the end of Spring 1990 of the students transferring in the fall of 1988 or 1989 was as follows:

**PGCC Transfers at Towson State University
GPAs of Fall Entrants at the End of Spring 1990**

Entering Term	Entered in Fall	Enrolled Spr 90	Cumulative GPA after Spring 1990			
			<1.0	1.0-1.9	2.0-2.9	3.0-4.0
Fall 1989	36	32	0	7	18	7
Fall 1988	46	36	1	0	28	7

Salisbury State University

Although located on Maryland's Eastern Shore, Salisbury State University has attracted increasing numbers of PGCC transfers in recent years. Three-fourths of the 25 Fall 1989 entrants enrolled in Spring 1990 had grade point averages of 2.0 or above:

**PGCC Transfers at Salisbury State University
GPAs of Fall Entrants at the End of Spring 1990**

Entering Term	Entered in Fall	Enrolled Spr 90	Cumulative GPA after Spring 1990			
			<1.0	1.0-1.9	2.0-2.9	3.0-4.0
Fall 1989	27	25	1	5	14	5
Fall 1988	16	15	0	0	10	5

Frostburg State University

Situated in the mountains of Allegany County, Frostburg State University is western Maryland's regional university and draws relatively few transfers from PGCC. The status of recent PGCC transfers as of the end of Spring 1990 was as follows:

**PGCC Transfers at Frostburg State University
GPAs of Fall Entrants at the End of Spring 1990**

Entering Term	Entered in Fall	Enrolled Spr 90	Cumulative GPA after Spring 1990			
			<1.0	1.0-1.9	2.0-2.9	3.0-4.0
Fall 1989	11	10	0	2	8	0
Fall 1988	4	3	0	0	0	3

University of Maryland at Baltimore

On average, ten former PGCC students enter the University of Maryland at Baltimore professional schools each fall. Although the University does not provide the majors of transfer students in its reports to the community colleges, it is likely that most of these students have enrolled in an allied health program at UMAB. Recent PGCC transfers have maintained relatively high grade point averages:

PGCC Transfers at the University of MD at Baltimore GPAs of Fall Entrants at the End of Spring 1990

Entering Term	Entered in Fall	Enrolled Spr 90	Cumulative GPA after Spring 1990			
			<1.0	1.0-1.9	2.0-2.9	3.0-4.0
Fall 1989	9	9	0	1	2	6
Fall 1988	11	10	0	1	2	7
Fall 1987	10	5	0	0	3	2
Fall 1986	11	1	0	0	1	0

Graduation statistics provide further evidence of the success of PGCC transfers at UMAB. Ten of the 11 entrants in 1986, and nine of the ten entrants in 1987, had graduated from UMAB by the end of Spring 1990.

University of Baltimore

The University of Baltimore, Maryland's only upper-division institution, admits undergraduates just for their junior and senior years. Relatively few PGCC students transfer there. The grade point average distribution for the eight transferring in Fall 1989 was as follows:

PGCC Transfers at the University of Baltimore GPAs of Fall Entrants at the End of Spring 1990

Entering Term	Entered in Fall	Enrolled Spr 90	Cumulative GPA after Spring 1990			
			<1.0	1.0-1.9	2.0-2.9	3.0-4.0
Fall 1989	8	7	1	0	2	4

University of Maryland Baltimore County

Rather than grouped grade point average information, the data for the University of Maryland Baltimore County were mean G.P.A.s for selected cohorts. Mean grade point averages were reported for PGCC transfers, all Maryland community college transfers, transfers

from other campuses in the University of Maryland System, and transfers from other four-year schools. Averages were reported for all students transferring in Spring 1990 as well as all transfers enrolled in Spring 1990 regardless of transfer date.

Mean Cumulative Grade Point Averages as of End of Spring 1990
 Selected Student Groups
 University of Maryland Baltimore County

	<u>New Transfers</u> <u>in Spring 1990</u>	<u>All Transfers</u> <u>Enrolled Spring 90</u>
Prince George's	2.15	2.64
All two-year transfers	2.62	2.86
Univ. of Md. transfers	2.60	2.83
Other four-year transfers	2.84	2.97

Based on mean grade point averages, it appears that PGCC students were doing less well than transfers from other Maryland community colleges, other UMS campuses, or other senior institutions.

To sum up this information on the transfer performance of recent PGCC students, the number of fall transfers, the number and percentage retained the following spring, and the percent of the persisting students with grade point averages of 2.0 and above are shown for Fall 1989 transfers in the following table:

PGCC Transfers to Selected UMS Campuses in Fall 1989
 Retention and Percent with at Least 2.0 Grade Point Average
 as of the End of Spring 1990

	<u>Transferred</u> <u>Fall 1989</u>	<u>Enrolled</u> <u>Spring 1990</u>	<u>Retained</u> <u>Spring 90</u>	<u>Percent</u> <u>GPA > 2.0</u>
UMCP	275	231	84%	81%
Bowie State	77	69	90%	88%
Towson State	36	32	89%	78%
Salisbury State	27	25	93%	76%
Frostburg State	11	10	91%	80%
UMAB	9	9	100%	89%
U. of Baltimore	8	7	88%	86%

These data from the University of Maryland System provide one perspective on the performance of PGCC students after they leave the community college. Other mechanisms, including a statewide tracking system, are under development.

Success Rates of Full-time Students Four Years After Entry

Accountability mandates from accrediting agencies and state government require the reporting of student graduation and transfer rates. State reporting systems maintained by the Maryland Higher Education Commission (MHEC) provide one means of computing these measures. At the instigation of the State Board for Community Colleges, MHEC staff used fall enrollment and degree systems to determine graduation and transfer rates for first-time full-time entering community college cohorts in fall 1982 through 1985. The analysis reported the graduation, transfer, and continuing community college enrollment of these four cohorts four years after entry. Students beginning their college careers part-time were not included in this analysis. (At PGCC in Fall 1985, for example, three of every five first-time entrants enrolled part-time. These students were not in the MHEC database used for this analysis.) In this section, results from this analysis for PGCC and four peer colleges are presented.

Transfers to Maryland Senior Colleges or Universities

For many students, transfer takes priority over earning a community college award. Thus the rate of transfer constitutes an important student outcome measure.

Statewide, the MHEC analysis found approximately a fourth of the full-time entrants had transferred to a four-year school within four years of community college entry. For each cohort, the number transferring without first earning a community college award was double the number who graduated and then transferred. Transfer rates varied somewhat among schools and over time. The lowest transfer rate in this study was 7 percent of the 1983 entrants to the Community College of Baltimore; the highest was 36 percent of the 1984 entrants to Charles County Community College. Prince George's recorded transfer rates between 21 and 28 percent. Transfer rates for PGCC and four peer colleges for all four cohorts studied were as follows:

Percent Transferring to Senior Institutions in Maryland First-time Full-time Students Four Years After Entry

	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Prince George's	25%	24%	21%	28%
Anne Arundel	30%	25%	29%	33%
Catonsville	26	29	27	29
Essex	23	23	27	23
Montgomery	26	26	29	29
All MD CCs	22%	21%	23%	25%

Among PGCC peer colleges, only Essex experienced lower rates of transfer during the study period. Anne Arundel, Catonsville, and Montgomery had higher transfer rates than PGCC in all four cohorts.

A.A. Degree or Certificate Graduation

Between 13 and 18 percent of the students entering PGCC as full-timers in fall terms 1982 through 1985 had earned an award from the College within four years. While falling below the statewide graduation rates for all four cohorts studied, PGCC students graduated at higher rates than entrants at Montgomery College in every case:

Percent Earning a Degree or Certificate
from Initial Community College
First-time Full-time Students Four Years After Entry

	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Prince George's	18%	13%	14%	13%
Anne Arundel	19%	16%	19%	21%
Catonsville	16	17	17	14
Essex	22	19	20	20
Montgomery	12	11	11	10
All MD CCs	20%	18%	19%	19%

Less than a fifth of the students starting their college careers as full-time students at PGCC had graduated from the College within four years of entry.

Student Success: Transferred, Graduated, or Still Enrolled

Students have many goals in coming to the community college, including goals other than earning a college degree. However, assuming that students starting out full-time probably are degree-seekers, the graduation rates displayed above may understate the total level of achievement of that goal. For students who aspire to the bachelor's degree, the A.A. may be considered unnecessary (and in some cases a delaying obstacle, as the A.A. may require courses not needed for the desired bachelor's degree). In addition, time-bound studies may not allow sufficient time for students who need to complete remediation, or who may have to switch to part-time attendance, to complete a program. Thus students who have transferred or who are still attending the community college are potential graduates and should not, by default, be considered unsuccessful. The State Board for

Community Colleges has termed the percentage of students who have graduated, transferred, or are still enrolled the "student success rate." By this measure, slightly more than two-fifths of the full-time students may be considered successful during the four-year period:

"Student Success Rates"
 Percent Transferred, Graduated, or Still Enrolled
 First-time Full-time Students Four Years After Entry

	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Prince George's	43%	40%	39%	43%
Anne Arundel	48%	42%	46%	48%
Catonsville	42	46	45	42
Essex	43	43	44	44
Montgomery	45	45	46	46
All MD CCs	42%	41%	43%	45%

The analysis in this section has reviewed the status of entering cohorts of first-time full-time students to Maryland community colleges in the fall terms of 1982 through 1985 in terms of graduation, transfer to senior institutions, and continuing enrollment four years after entry. The MHEC analysis based on state reporting systems excluded students starting their college careers on a part-time basis, and relied on fall enrollment tapes to determine transfer or continuing enrollment. The transfer of students who transferred during a spring or summer term and did not enroll in a subsequent fall term was missed. All transfer to schools outside of Maryland was also missed. The study population was all first-time full-time entrants each fall, regardless of the students' goals in attending. Thus, some of the students who did not graduate or transfer may not have had either as a goal.

Despite the above limitations, this MHEC analysis provided a useful perspective on community college student success. Two-fifths of the College's full-time students have shown evidence of success, based on the data available on state databases, within four years of entry. While students may gain from attendance without ever graduating or transferring, these two outcomes are included in reporting mandates from Middle States and MHEC.

A Close Look at Students Entering PGCC in Fall 1990

To get a better understanding of student progress and achievement, it is often helpful to look at a single group of students in depth. In this section, the background and progress of

first-time college students who enrolled at PGCC in Fall 1990 is reviewed. Students attending first in the preceding summer session are excluded, as are students new to PGCC who have attended college elsewhere before. PGCC is the first collegiate experience for this study group.

How well prepared for college study were the Fall 1990 entrants?

Nearly four out of five Fall 1990 entrants completed the entire Comparative Guidance and Placement (CGP) test measuring reading, writing, and mathematics skills. Sixty percent of those tested in all three areas earned scores indicating a need for remediation in at least one area. A fifth of the tested students needed remediation in all three areas:

**Remediation Needs of Fall 1990 Entrants
Tested in All 3 CGP Areas**

Tested in all 3 areas	2,081	100%
No remediation needed	835	40%
Remediation needed	1,246	60%
In one area	412	20%
In two areas	393	19
In three areas	441	21

The College does not have a policy requiring students to complete remediation before enrolling in credit classes. Instead, individual departments may establish individual course prerequisites based on CGP test scores or completion of needed remedial ("developmental") courses. Students may take only a part of the CGP rather than the whole examination in order to meet a specific course prerequisite. The analysis that follows looks at the remedial needs and coursetaking of the Fall 1990 entrants for each area (English, reading, and mathematics) separately. Completion of remediation is defined as earning a developmental course grade sufficient to meet the prerequisite of common introductory courses meeting the College's general education requirements in each area. For reading, the division-wide Social Sciences requirement of a P2 in DVR005 or successful completion of DVR006 was used. (Students are placed in different levels of developmental based on their test scores and individual needs, and may make progress during a semester without completing all the remediation needed to meet credit course prerequisites. A future report will examine student movement through the various levels of developmental coursework.)

A total of 2,207 students took the CGP Sentences test. Nearly 38 percent received scores below 46, thus needing to complete developmental English before enrolling in English 101. Sixty-one percent of those needing remediation enrolled in the appropriate developmental course in Fall 1990. However, only 15 percent completed DVE001 (grade P2) and were ready for English 101 in Spring 1991. Less than one in ten of the Fall 1990 entrants who were identified by testing as needing remedial English completed it during their first semester at PGCC:

Developmental English
Identification, Enrollment, and Completion
Fall 1990 Entrants to PGCC

Number assessed	2,207		100%
Needed remediation	832	100%	38%
Took remedial course	507	100%	61%
Completed remediation	76	15%	9%

CGP test results found 40 percent of those tested needed remedial work in reading to be prepared for college-level courses. Fifty-five percent of those identified took developmental reading in Fall 1990:

Developmental Reading
Identification, Enrollment, and Completion
Fall 1990 Entrants to PGCC

Number assessed	2,200		100%
Needed remediation	872	100%	40%
Took remedial course	479	100%	55%
Completed remediation	204	43%	23%

Nearly 43 percent of those taking developmental reading in Fall 1990 completed remediation and were ready to enroll in credit classes. About one-fourth of all the Fall 1990 entrants identified as needing remedial reading completed the necessary remediation in the fall.

Of the 2,257 students tested in mathematics, 933 or 41 percent earned scores that indicated a need for remedial work. Thus, mathematics, by a slight margin, appeared to be the area of greatest deficiency among the Fall 1990 entrants:

Developmental Mathematics
Identification, Enrollment, and Completion
Fall 1990 Entrants to PGCC

Number assessed	2,257		100%
Needed remediation	933	100%	41%
Took remedial course	539	100%	58%
Completed remediation	15	3%	2%

Fifty-eight percent of the students identified as needing remedial work in mathematics took a developmental mathematics course in Fall 1990. However, only three percent of those taking a developmental mathematics course completed remediation (earned a P4 grade) in Fall 1990 and were prepared to take a credit mathematics course in the spring. Less than two percent of those identified as needing remediation at entry in Fall 1990 were ready to take credit mathematics their second semester.

How much progress towards an award had these students made after one semester?

After one semester, how were the Fall 1990 entrants to PGCC doing academically? To assess this, two measures were employed: total credit hours earned, an indication of progress toward an award, and grade point average (GPA). Nearly a third of the new students had failed to earn a single credit. Two-thirds of these students had not attempted a credit class, taking developmental courses only, or had withdrawn from all credit classes. The remainder received failing grades. A majority of the Fall 1990 entrants had earned 3 or fewer credits. Only 63 students, or 2 percent, had earned 15 credits or more and were on a pace to graduate within two years.

Sixty-four percent of the 2,086 students attempting credit classes had grade point averages at the end of Fall 1990 of 2.0 or above. In general, students earning more credits also had higher GPAs. Students earning 3 or 6 credits had a mean GPA of 2.4, those earning 9 credits had a mean GPA of 2.5, those earning 12 credits had a mean GPA of 2.7, and those earning 15 credits had a mean GPA of 3.1. The better students were making better progress.

To present the full picture of the progress made by the Fall 1990 entrants, the table below shows total students by the number of earned credits as of the end of the fall term. The number and percent of students in each category with grade point averages of 2.0 and above are also shown:

Fall 1990 Entrants after One Semester:
Total Credits Earned and Proportion with 2.0 + GPAs

<u>Total Credit Hours Earned</u>	<u>Number of Students</u>	<u>Percent of Students</u>	<u>G.P.A. Number</u>	<u>2.00 + Percent</u>
0	846	32%	0	0%
1	39	1	30	77
2	40	2	29	73
3	629	24	448	71
4	72	3	53	74
5	34	1	16	47
6	314	12	231	74
7	46	2	23	50
8	24	1	15	63
9	207	8	168	81
10	52	2	31	60
11	24	1	20	83
12	166	6	147	89
13	60	2	48	80
14	27	1	24	89
15	41	2	41	100
16	20	1	19	95
17	1	<1	1	100
19	1	<1	1	100
Totals	2,643	100%	1,345	64%*

*percentage based on 2,086 students with GPAs; developmental courses are not included in calculations of GPAs

Based on their attempted hours (a minimum of six) and grade point averages, 224 Fall 1990 entrants were placed on academic probation at semester's end.

How many of the Fall 1990 entrants returned in Spring 1991?

How many of the students attending college for the first time in Fall 1990 continued their studies at PGCC in Spring 1991? This first chance to measure the persistence of this cohort found 1,622

students, or 61 percent, returned. Students who started full-time in the fall were more likely, at 77 percent, to return than those starting their college careers on a part-time basis (52 percent continuing). Students with a stated goal of earning the A.A. degree at PGCC were more likely to continue. Students who said their primary reason for attending PGCC was to prepare for transfer to a four-year institution were more likely to continue than those exploring career or academic options, updating job skills, or primarily seeking self-enrichment.

Fall 1990-Spring 1991 Retention of Fall 1990 Entrants

	Enrolled <u>Fall 90</u>	Returned <u>Spring 91</u>	Retention <u>Rate</u>
Total first-time	2,643	1,622	61%
Full-time	1,150	889	77%
Part-time	1,493	773	52
A.A. degree goal	1,172	776	66%
Certificate goal	388	203	52
Courses only	1,083	643	59
Transfer prep.	1,527	1,066	70%
Career entry	372	214	58
Explore options	350	184	53
Update job skills	211	87	41
Enrichment	167	63	38

Was fall-to-spring retention related to academic achievement?

Was fall-to-spring retention related to academic success in the fall semester? Examination of the entrants' grade point averages at the end of the fall term is suggestive. (A total of 557 students did not attempt any credit classes or withdrew from all credit classes they had initially enrolled in and thus had no grade point average; half returned in the spring.) In general, the higher the student's grade point average, the more likely they were to continue their studies in the spring. However, the Fall 1990 entrants earning the highest grade point averages, 3.75 and above, as a group had a lower retention rate than students falling in the 1.00 - 3.74 range. Retention rates for each grouping of grade point averages were as follows:

Retention Rate by Fall Grade Point Average

	<u>Enrolled</u> <u>Fall 90</u>	<u>Returned</u> <u>Spring 91</u>	<u>Retention</u> <u>Rate</u>
0.00	293	67	23%
0.01 - 0.99	116	56	48
1.00 - 1.99	332	230	69
2.00 - 2.99	617	467	76
3.00 - 3.74	452	339	75
3.75 - 4.00	276	173	63
No credits attempted	557	290	52%

This overview of the College's most recent fall class of first-time college students has revealed a group with significant educational deficiencies (60 percent needing remediation in at least one area) that is making slow academic progress (only two percent on a pace to graduate in two years). Further analyses, examining performance indicators controlling for various factors such as academic goal, are needed. In order to provide a longitudinal context for understanding PGCC student achievement, the research office plans to follow this group for the next few years, issuing periodic status reports.

Summary

This report began with the success stories of our graduates, and ended with a rather discouraging description of the preparedness and progress of our most recent entering fall class. But perhaps this is the true and appropriate picture of an open-door community college in the 1990s. Our mission is to accept students regardless of their academic ability and background, to assess and place them in appropriate courses, support their efforts to learn and advance, and to uphold academic standards so that those we certify as graduates have the skills necessary to be successful in transfer, employment, and other post-graduate endeavors. Given our mission, perhaps it is unrealistic to expect all to achieve in terms of degree attainment or successful transfer. Many who do not attain these traditional goals have nonetheless been enriched by their experiences at the College.

Craig A. Clagett
Director
Institutional Research and Analysis

**FIRST-TIME ENTRANTS IN FALL 1990
TESTED IN ALL AREAS
AS OF THE THIRD WEEK**

	Tested In All Areas Number	Remediation Needed in at Least One Area	
		Number	Percent
Headcount	2,081	1,246	60%
Black	1,116	877	79%
White	816	291	36%
Asian	86	43	50%
Hispanic	54	31	57%
Native American	9	4	44%
Male	872	506	58%
Female	1,209	740	61%
Unknown	7	4	57%
16-20	1,578	900	57%
21-25	224	133	59%
26-35	182	139	76%
36-59	90	70	78%
60 and over	0	0	NA
Full-time	1,076	569	53%
Part-time	1,005	677	67%
PG Public Schools	1,400	849	61%
PG Private Schools	155	55	35%
Other MD Schools	118	67	57%
DC Schools	113	98	87%
Other Out of State	193	111	58%
GED	80	54	68%
Not High School Grad	22	12	55%
Expl New Career	240	170	71%
Prep Immed Entry	307	236	77%
Prep for Transfer	1,347	695	52%
Update Skills	87	67	77%
Self Enrichment	89	70	79%
Courses	810	413	51%
Certificate	290	215	74%
AA	980	617	63%

Table 1

ERIC Clearinghouse for
Junior Colleges