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ABSTRACT

In 1994, Central Piedmont Community College (CPCC), in North Carolina, conducted a survey of graduates from the 1991-92 and 1992-93 academic years who had subsequently enrolled in a four-year college and university to determine outcomes and assess graduates' satisfaction with the college, comparing findings with outcomes from previous years. Surveys were mailed to 1,763 graduates of curriculum programs, generating responses from 500, or 28.4% of curriculum graduates from the period, of whom 139 were classified as transfers. Survey results for the transfer graduates included the following: (1) 50.4% were female, 49.6% were between the ages of 19 and 25, and 8.7% were Black; (2) on average, transfer students completed their CPCC programs in 10.3 quarters, and 89.3% indicated that they had reached their self-declared goals; (3) 69.3% enrolled in a public state university, 18.1% in private four-year colleges, and 10.8 in CPCC programs; (4) regarding their general education experience at CPCC, respondents gave the highest ratings to critical thinking, communication in writing, awareness of values and beliefs of others, making decisions about employment, and working with different people; (5) top-ranked instructional areas were quality of instruction, course content, library facilities and materials, and availability of instructors; (6) 95.6% were satisfied or very satisfied with CPCC overall; and (7) compared with previous studies, respondents assigned higher scores to all areas of services and facilities. (KP)

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TRANSFER GRADUATE FOLLOW-UP STUDY 1991-92 & 1992-93

Planning & Research
September 1994

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Central Piedmont
Community College

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This study reports the findings of a graduate follow-up survey conducted by the Planning and Research Office at Central Piedmont Community College (CPCC). It has the following purposes: 1) to highlight findings concerning the achievement of transfer graduates and their satisfaction with the college in many important areas; 2) to compare recent graduates' opinions with those of earlier graduates and with 1992-93 current students' opinions of the college; and 3) to investigate the factors that may affect the overall quality of CPCC and graduate satisfaction.

The CPCC data system maintains student demographic data and academic records. All other information about graduate achievement and opinions about the College were collected directly from graduates. The Planning & Research Office sent the 1,763 curriculum students graduated in the 1991-92 or 1992-93 academic year up to three sets of correspondence, consisting of a questionnaire with a cover letter, a postcard reminder, and a replacement of the questionnaire with yet another cover letter. The survey generated 500 completed questionnaires, representing 28.4 percent of the curriculum graduates. Of the 500 respondents, 139 are college transfers. A college transfer student is defined in this study as a graduate who enrolled in a 4-year college or university, regardless of the program the student attended at CPCC. The transfer graduate distribution across CPCC program areas is listed below.

Program Area	Percent
College Transfer	50.7
General Education	12.2
Technical	35.4
Vocational	1.7

A study about career graduates has been prepared separately. A more detailed report is available at the Planning & Research Office upon request.

1. General Background of Transfer Graduates

The following table summarizes the demographic background of sampled CPCC transfer students. The statistics show a balanced gender distribution, with male and female students each accounting for about one half of the transfers. About 51 percent of the transfers are 25 years of age or younger, 21.7 percent are 26 to 30 years of age, and the balance are 31 years of age or older. The sample statistics also show that Black students account for 8.7 percent of the transfers as opposed to 15.6 percent of career graduates who are Black (see *Career Graduate Follow-up Study, 1991-92 & 1992-93*), suggesting that proportionally fewer Black students were transfers and more were career graduates.

Demographic Summary

GENDER	Percent	
Female	50.4	
Male	49.6	
AGE	Percent	
< 19	2	1.7
19-25	57	49.6
26-30	25	21.7
31-40	22	19.1
41+	9	7.8
ETHNICITY	Percent	
Black	8.7	
Asian	5.2	
White	86.1	

At the time of enrollment, each student reported his/her academic goal and a practical reason for enrolling at CPCC. The following table shows that 96 percent of the transfers came to CPCC clearly with a 2-year college degree in mind, and 58.2 percent intended to continue their education at a 4-year college or a university. The statistics also indicate that about 35 percent (19.4%+10.2%+5.1%) of the transfers enrolled in CPCC for job preparation and decided to continue their formal education at a 4-year college or university.

GOAL	Percent
2-yr assoc. degree.	96.0
Other	4.0
PRACTICAL REASON	Percent
For first job	19.4
For differ. job	10.2
For current job	5.1
Transfer to 4-yr	58.2
Self enrichment	3.1
Others	4.1

2. Achievement of Transfer Graduates

GPA is used to measure student performance at CPCC. Seventy-six percent of the transfers reported GPAs from 3.0 to 4.0. The average mean is 3.3. According to CPCC student records, 32.2 percent of the transfers completed their programs in 8 quarters or less, 35.6 percent finished in 9 to 12 quarters, and 32.2 percent graduated in 13 quarters or more. On the average, it took 10.3 quarters for a typical transfer graduate to complete his/her program.

GPA	Percent
2 < GPA <= 3	24.3
3 < GPA <= 4	75.7
Average GPA:	3.30

QUARTERS	Percent
8 or less	32.2
9-12	35.6
13 or more	32.2
Average	10.3 Quarters

Of the 131 graduates who answered the question, 89.3 percent indicated that they completely achieved their self-declared goals at CPCC.

GOAL ACHIEVEMENT	Percent
Completely	89.3
Partly	9.9
Not at all	0.8

By definition, all transfer graduates have attended college at some time following graduation. Currently, 82.4 percent of the transfer graduates are still in school, and 17.6 percent are no longer attending school. Among the transfers who are currently attending school, 67.2 percent are full-time students, and 32.8 percent are part-timers.

ATTENDED SCHOOL AFTER GRADUATION	Once Attended	Now Attending
Yes	100.0%	82.4%
No	0.0%	17.6%
FULL-TIME/PART-TIME	Percent	
Full-time students	67.2	
Part-time students	32.8	

Of the transfers currently attending school, 82.7 percent enrolled in public universities. The second biggest group of the graduates is in private 4-year colleges, accounting for 21.6 percent of the transfers. Notably, 12.9 percent of the transfer graduates are still attending CPCC. Since one student may enroll in more than one school at the same time, these percentages add up to more than 100 percent.

TYPES OF COLLEGES	Percent
Returned to CPCC	12.9
A public state university	82.7
A private four-year college	21.6
A technical or commercial school	0.7
Manufacturer/employer school	1.4

Most transfer graduates, 85.3 percent, enroll in 4-year college programs related or partly related to their CPCC programs. This indicates a continuity of the students' academic effort and suggests that CPCC transfer programs are effective in preparing transfer students for their junior and senior years in 4-year colleges.

STUDY FIELD RELATED TO CPCC PROGRAM	Percent
Directly related	49.3
Somewhat related	36.0
Not related	14.7

Survey responses indicate that more than 30 percent of the CPCC transfers successfully transferred all their CPCC courses, another 18.9 percent (3.3% + 15.6%) found that 1-4 courses were not accepted at their current schools, and 50.8 percent (20.5% + 26.2% + 4.1%) of the transfers indicated at least 5 courses taken at CPCC were not transferable.

CPCC COURSES NOT TRANSFERABLE	Percent
None	30.3
One Course	3.3
2-4 Course	15.6
5-8 Course	20.5
9 or more	26.2
Did not Transfer	4.1

To evaluate CPCC transfer graduates' current performance, respondents were asked to indicate their grades at the transfer institutions. It appears that most CPCC transfers made respectable

grades, with 61.2 percent of the transfers earning mostly As and Bs and 37.2 percent making Bs and Cs.

GRADES IN CURRENT COLLEGES	Percent
Mostly As and Bs	61.2
Mostly Bs and Cs	37.2
Mostly Cs and Ds	1.7

3. Opinion of Transfer Graduates about CPCC Services/Facilities

How Do the Transfer Graduates Rate the CPCC General Education Experience?

Transfer students were asked to indicate how well their first two years of college had prepared them with a general education or sound base of fundamental knowledge and skills, essential in dealing with real-life issues. Using a 3-point scale, respondents rated 20 areas in which CPCC general education has potential influence. The responses are summarized below. The areas are arranged in descending order by sample means of the ratings. The average scores of the 20 areas range from 2.08 to 2.42. The top five areas are: (1) development of critical thinking skills, (2) communication in writing, (3) awareness of values, beliefs, and behaviors of others, (4) making decisions about education and employment, and (5) working with different people. Two areas—critical thinking and working with different people—are ranked among the top five areas by both transfers and career graduates (see *Career Graduate Follow-up study, 1991-92 & 1992-93*).

CPCC General Education Experience

Rank	AREA	Not at All	Some what	Very Much	Mean
1	Develop critical thinking skills	4.0%	50.4%	45.6%	2.42
2	Communicate in writing	3.8%	53.0%	43.2%	2.39
3	Aware of values, beliefs, behaviors of others	6.9%	51.5%	41.5%	2.35
4	Make decisions about educ. & employment	9.0%	46.6%	44.4%	2.35
5	Work with people different from myself	9.2%	48.5%	42.3%	2.33
6	Apply math concepts and skills	13.1%	42.3%	44.6%	2.32
7	Aware of own values, beliefs, and behaviors	6.9%	56.9%	36.2%	2.29
8	Listen perceptively	7.0%	56.6%	36.4%	2.29
9	Sensitive to the impact of technology	11.4%	49.6%	39.0%	2.28
10	Understand scientific principles	10.5%	51.6%	37.9%	2.27
11	Communicate orally	10.5%	51.9%	37.6%	2.27
12	Read with understanding	13.6%	47.2%	39.2%	2.26
13	Work as a member of a group	12.9%	50.8%	36.4%	2.23
14	Recognize and develop my creative skills	9.8%	58.6%	31.6%	2.22
15	Understand Amer. culture & society	13.5%	51.9%	34.6%	2.21
16	Recognize the interdependence of the world	1.7%	54.2%	32.1%	2.18
17	Understanding other places and times	13.8%	59.2%	26.9%	2.13
18	Understand the world's societies and cultures	19.4%	50.4%	30.2%	2.11
19	Use computer	21.0%	48.4%	30.6%	2.10
20	Understand my own culture	20.8%	50.8%	28.5%	2.08

How Do the Transfer Graduates Rate CPCC Instruction and Instruction-Related Areas?

Instruction and instruction-related services and facilities are important areas which directly influence students' educational achievement. The survey listed 15 instructional items and asked the graduates to rate these items on a 5-point scale, with 1 being 'very poor,' 2 'poor,' 3 'average,' 4 'good,' and 5 'very good.' These areas are arranged in descending order according to the sample means. Compared with the responses of career graduates (whose sample means range of 3.60 to 4.28), transfer graduates' ratings were higher (their sample means range from 3.80 to 4.44). All items were considered 'good' or 'very good' by more than 60 percent of the transfer graduates. The most outstanding areas are quality of instruction, course content in major program, library facilities and materials, and availability of instructors, with average scores of 4.26 or better.

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Ratings of CPCC instructional items

INSTRUCT. ITEM	Very Poor	Poor	Average	Good	Very Good	Mean
1 Quality of instructors	0.0	0.0	11.7	32.8	55.5	4.44
2 Content in major courses	0.0	3.1	13.1	33.1	50.8	4.32
3 Library facilities	0.0	1.5	14.4	40.2	43.9	4.27
4 Library materials	0.0	0.8	17.7	36.2	45.4	4.26
5 Availabil. instructors	0.0	2.2	14.6	38.7	44.5	4.26
6 Assistance in the library	1.6	0.8	16.3	40.3	41.1	4.19
7 Content in general courses	0.0	1.5	20.7	38.5	39.3	4.16
8 Help of staff	1.5	2.9	19.7	38.0	38.0	4.08
9 Library hours	0.8	6.4	16.8	38.4	37.6	4.06
10 Classroom facilities	0.7	2.9	23.9	44.2	28.3	3.96
11 Course availability	1.5	4.4	26.5	37.5	30.1	3.90
12 Help of administrators	3.3	3.3	27.5	36.7	29.2	3.85
13 Lab/shop facilities	1.7	9.2	21.7	39.2	28.3	3.83
14 Lab/shop equipment	0.9	6.1	32.2	33.9	27.0	3.80

How Do the Transfer Graduates Rate CPCC Services?

All areas of college services and facilities may have an impact on the graduates' experience and success at CPCC. Graduates were asked to rate 22 specified areas on the same 5-point scale used to rate instructional items. All these areas were assigned an average score of 3.26 or better by the respondents. Parking received a mean score of 3.26, much higher than the score assigned by career graduates (2.86, see *Career Graduate Follow-up Study, 1991-92 & 1992-93*). Apparently, the transfer graduates and the career graduates used different standards to rate CPCC parking services and facilities. The research finding implies that CPCC parking services/facilities are reasonably good, when compared to parking in other

higher education institutions the CPCC transfers are attending; however, parking services at CPCC are not as convenient as at many companies where the career graduates are employed. The survey also shows that many transfer graduates did not use many services. In general, the more students used the services, the more reliable the sample mean scores. Therefore, sample means of admissions, registration, records/transcripts, bookstore, and parking are more reliable than others. More than 60 percent of the graduates gave admissions, registration, and records/transcripts 'good' or 'very good' ratings.

Ratings of CPCC Services

AREA	1	2	3	4	5	6
1. Services for disabled	7.4	18.5	27.8	46.3	85.4	4.13
2. Admissions	2.2	28.4	35.8	33.6	5	4.00
3. Veterans services	4.2	37.5	12.5	45.8	115	3.96
4. Placement & testing center	9.0	22.1	34.4	34.4	17	3.91
5. Instruct. TV	5.0	31.7	30.0	33.3	79	3.90
6. Registration	8.8	22.8	33.1	35.3	3	3.90
7. Advising by faculty	15.0	16.7	28.3	40.0	19	3.89
8. Records/transcripts	8.7	21.2	40.1	29.9	2	3.88
9. Business office/cashier	7.1	31.6	32.5	28.9	25	3.82
10. Welcome & info. center	5.2	32.8	35.3	26.7	23	3.81
11. Graduation services	11.0	28.0	31.0	30.0	39	3.74
12. Academic tutoring	8.2	36.7	26.5	28.6	90	3.71
13. Co-op serv.	11.2	36.1	22.2	30.6	103	3.67
14. Counseling	20.7	20.7	26.1	32.4	28	3.63
15. Security	17.1	27.0	30.6	25.2	28	3.59
16. Bookstore	11.0	36.8	33.1	19.1	3	3.54
17. College stud. org.	18.2	31.8	22.7	27.3	73	3.52
18. Food serv.	15.3	44.2	25.0	15.4	35	3.37
19. Employment services	25.0	27.1	27.1	20.8	91	3.35
20. Fin. aid	28.9	23.1	26.9	21.2	87	3.27
21. College activities	25.7	34.3	18.6	21.4	69	3.27
22. Parking	15.4	30.6	28.4	15.7	5	3.26

Note: (1) Figures in column 1, 2, 3, 4 are percentages of respondents who rated these areas. Column heading 1='poor' or 'very poor', 2='average', 3='good', and 4='very good'.
 (2) column 5 lists number of no responses for each area.
 (3) column 6 lists the sample mean of ratings for each area.

What Are the Most/Least Helpful Major Courses?

The transfer graduates were asked to list the most and least helpful curriculum program courses. Contrary to career graduates, many transfer graduates saw algebra, math, English, and other courses which focus on basic knowledge as the most helpful curriculum courses. Several transfer graduates explicitly appreciated all courses they took at CPCC. Many transfer graduates also listed the least helpful curriculum courses. An exhaustive list of the most and least helpful courses will be sent to deans and department heads.

Transfer graduates' opinions were gathered about the things they liked best and least and about the most important things needing improvement at CPCC. At least 15 percent of the transfer graduates expressed that instructors were what they liked best about CPCC. Among the things transfer graduates liked least, parking was mentioned more often than others. In the list of the most important things to be improved, the graduates had different opinions, and no single area showed a high frequency. However, none of the respondents saw parking as an important area to improve. A complete list of areas the graduates liked best or least and a list of the most important areas for improvement at CPCC will be sent to deans and department heads.

Are the Transfer Graduates Satisfied with CPCC Preparation for Transfer?

Graduate satisfaction with CPCC preparation for transfer measures how well the College meets transfer students' needs for academic preparation. A large proportion, 74 percent, of transfer graduates were satisfied or very satisfied with CPCC preparation for transfer to another school. Only 5.3 percent were unsatisfied or very unsatisfied with CPCC preparation. In a 5-point satisfaction scale with 1 being 'very unsatisfied' and 5 being 'very satisfied,' the sample mean is 4.02.

SATIS. WITH PREPARATION	Percent
Very unsatisfied	3.8
Unsatisfied	1.5
Somewhat satisfied	20.6
Satisfied	36.6
Very satisfied	37.4
Sample mean:	4.02

Are the Transfer Graduates Satisfied with the CPCC Program Overall?

CPCC programs may offer students more than just academic preparation. Thus, a more comprehensive measure is graduate satisfaction with their programs overall. The survey results show that a much larger proportion, 91.9 percent, of the transfer graduates were satisfied or very satisfied with their programs. Using the same 5-point satisfaction scale as in satisfaction with transfer preparation, the average score is 4.35.

SATIS. WITH PROGRAM	Percent
Unsatisfied	1.5
Somewhat Satisfied	6.6
Satisfied	47.8
Very Satisfied	44.1
Sample mean:	4.35

What Is the Overall Satisfaction of Transfer Graduates with CPCC?

The most aggregate measure of graduate opinion of CPCC is graduate satisfaction with CPCC overall, using the same 5-point satisfaction scale. Of the transfer graduates who responded to the question, 95.6 percent were satisfied or very satisfied with CPCC overall. The sample mean score of satisfaction is 4.39, higher than both the sample mean of satisfaction with CPCC preparation for transfer and satisfaction with CPCC programs. Compared with the findings from the career graduate survey, the transfer graduates are more likely to be satisfied or very satisfied with CPCC preparation, with CPCC programs, and with CPCC overall (see *Career Graduate follow-up study*).

SATIS. WITH CPCC OVERALL	Percent
Very unsatisfied	1.5
Unsatisfied	0.7
Somewhat satisfied	2.2
Satisfied	48.2
Very satisfied	47.4
Sample mean:	4.39

Like the career graduates, the group of satisfied or very satisfied transfer graduates becomes larger as the question is asked in a broader and broader fashion, going from satisfaction with preparation with transfer (4.02) to satisfaction with their program overall (4.35) to overall satisfaction with CPCC (4.39). This finding suggests that CPCC offered students more than academic training.

Would the Transfer Graduates Recommend CPCC to their Friends?

Showing their satisfaction with CPCC, 94.2 percent of the transfer graduates would recommend CPCC to their friends if a two-year college meets the needs of their friends. The result implies that the College can consider the graduates as a potential marketing force for the college.

RECOMMEND CPCC TO FRIENDS	Percent
Yes	94.2
Yes. With Reservation	5.8
No	0.0

4. Comparison of Current Student Opinions and Transfer Graduate Opinions

Individual areas of services and facilities may experience changes in quality over time, and different groups of students may have different opinions about these areas. To examine the probable changes and the different perceptions, survey results from the 1993 *Current Student Opinion Study*, the 1991 *Graduate Follow-up Study*, and this *Graduate Follow-up Study* are compared with one another. The

results are presented in the following table. A broken line indicates an area not surveyed.

Comparison of Graduate and Current Student Opinion

AREA	89-90 Grad. Stud.	91-92& 92-93 Transf.	1993 Current Stud.
Quality of instruction	4.30	4.44	3.93
Library facilities	4.40	4.27	4.03
Library materials	4.40	4.26	3.90
Availability of instructor	----	4.26	3.68
Help of staff	----	4.08	3.74
Lab/shop facilities	3.90	3.83	3.61
Classroom facilities	4.00	3.96	3.62
Course availability	3.90	3.90	3.44
Services for disabled	4.40	4.13	3.08
Placement and test ctr.	4.10	3.91	3.31
Advising by faculty	4.20	3.89	3.28
Welcome & info. center	----	3.81	3.29
Admissions	4.10	4.00	3.43
Counseling	3.80	3.63	3.28
Veterans ser.	----	3.96	2.41
Records/transcripts	4.00	3.88	3.26
Registration	3.90	3.90	3.54
Co-op service	3.70	3.27	2.95
Business off./cashier	4.10	3.82	3.19
Parking	2.60	3.26	2.74
Food service	3.20	3.37	2.90
Bookstore	3.60	3.54	3.52
Fin. aid	3.90	3.27	3.00

A one-by-one comparison of the sample means indicates that the transfer graduates always assign these areas higher scores than do current students. The difference between the 1993 current student rating and the 1989-90 graduate rating varies

from 0.08 for bookstore to 1.32 for services for disabled students, and the difference between the 1993 current student rating and the 1991-93 graduate rating ranges from 0.02 for bookstore and 1.55 for veterans services. Recent graduates rated most areas lower than earlier (i.e., 1989-90) graduates; however, instruction, parking, and food services did receive slightly higher scores from recent graduates. Because the three surveys were conducted at different times and the three groups can have different personal backgrounds and experiences, the observed differences can result either from changes in the quality of the areas or from different standards the three groups implicitly used to rate the areas.

5. Determinants of Graduate Overall Satisfaction with CPCC

The overall quality of a college is an important composite measure of the institution. The overall quality is determined by the quality of many smaller areas, such as services and facilities. However, not all areas contribute to the overall quality equally; therefore, it is essential to see the relationship between the overall quality of the College and all of the individual areas. Such knowledge could drive enhancement of overall quality in a low cost, high impact manner.

In the *Current Student Opinion Study, 1992-93*, a conceptual framework and a statistical model were established to investigate the relationship between the perceived overall quality of the College and the many smaller areas of services and facilities. The findings indicated that for current students in 1992-93 availability of instructors, classroom facilities, quality of admissions, and helpfulness of staff are the most significant contributors to perceived overall quality. Using responses from both career and transfer graduates to obtain a more significant estimate, this study replicates the procedure used to relate perceived quality of each area to perceived

overall quality of the college.

After controlling for graduates' demographic background, employment experience, and other factors, the estimates of a multivariate statistical model identified the following five areas of services or facilities that are closely related to overall quality of the institution (the multiple regression estimates are presented in the complete research report and are available upon request).

- Availability of instructors
- Course content in major program
- Counseling
- Business services / cashier
- Food services

The empirical estimates reveal that the 1991-92 and 1992-93 graduates share similar opinions with 1993 current students in some areas. However, the estimates also show that several other services or facilities which 1993 current students connected strongly with the overall quality of CPCC are not considered as important contributors to the overall quality of the College by the graduates.

Among all significant contributors, instructors and course content are by far the most important factors contributing to the graduates' overall satisfaction with CPCC, as they have the largest magnitudes of estimated influence on overall satisfaction and the highest levels of statistical confidence. The estimates suggest that other things being equal, a one point increase in the availability of instructors in a 5-point scale would lead to a 0.1433 point improvement in perception of quality of the College, and a one point improvement on major course content would upgrade perception of overall quality of CPCC by 0.1343 points. In the reverse direction, however, a one point decrease in the availability of instructors or in course content could result in a deterioration in the perception of overall quality of the College by the same amount as the estimates.

Statistically significant areas also include quality of counseling, business service/ cashier, and

food services. A one point increase in each of these three areas in a 5-point scale is estimated to lead to 0.0964, 0.0889, and 0.1051 point increases in the satisfaction with the overall quality of CPCC respectively.

The most significant and consistent finding from both the *Current Student Opinion Study* and *Graduate Follow-up Study* is the contribution of instructors to the overall quality of the College. In both studies, talking to or availability of instructors is the number one contributor to the overall quality of the institution. Among all instructional areas, items related to instructors always receive top mean scores. Compared with anything else listed in the studies, CPCC instructors are the most valuable assets of the institution. Any means the College can take to facilitate instructor availability or faculty interaction with students will almost certainly boost the perception of overall quality of the College.

Although many other service or facility areas may contribute to the overall quality of the institution, further studies are needed to see the relationship between these areas and the overall quality of the College. This *Graduate Follow-up Study*, coupled with *Current Student Opinion Study*, has provided preliminary findings. The estimates from these studies can serve as a starting point for future research.

6. Summary and Conclusion

This transfer graduate follow-up study surveyed 1991-92 and 1992-93 transfer graduates and analyzed their achievement and their satisfaction with CPCC. The findings provide first-hand information which may be used to evaluate each area of the College and support consideration of improvement in identified crucial areas.

Academic Performance

- The transfer graduates' academic records at CPCC are similar to career graduates -- 75.7 percent made GPAs of 3 or better and 24.3 percent earned

GPAs from 2 to 3; on the average, the transfers completed their programs at CPCC in 10.3 quarters; 84 percent reached their self-declared goals, and 9.4 percent partly reached their goals.

- The majority of transfer graduates are following the path they planned -- 93.5 percent attended school once after graduation, and 80.6 percent are still in school; among those who are attending school, 64.7 percent are full-time students.

- The favored choice of CPCC transfer graduates is a public state university, accounting for 69.3 percent of the transfers; the next biggest group, 18.1 percent, enrolled in private 4-year colleges; interestingly, 10.8 percent of the transfers are attending programs at CPCC.

- Nearly one-half of the transfers enrolled in programs at 4-year colleges/universities that are directly related to their CPCC programs; the rest of the graduates registered in programs more or less different from their CPCC programs. As a result, 43.2 percent of the graduates found up to four courses taken at CPCC would not transfer to their current programs.

- A significant number of the transfer graduates earned respectable grades in their current college or university -- 53.2 percent of the graduates made mostly As and Bs.

Graduate Opinions of CPCC

- Among the 20 areas in which CPCC general education experience may enhance knowledge, skills, and the well-being of graduates, critical thinking skills, communication in writing, awareness of values and beliefs of others, making decisions about education and employment, and work with different people received the highest ratings.

- The graduates gave all instructional areas scores from 3.80 to 4.44 on a 5-point scale. The top five areas are quality of instruction, course content, library facilities, library materials, and availability of instructors, with more than 80 percent of the graduates considering these areas to be good or very good.

- The transfer graduates assigned other CPCC service areas similarly high scores, ranging from 3.26 for parking to 4.13 for services for disabled students. Taking response rate into consideration, admissions, registration, and records/transcripts received the most reliable and highest scores, with more than 60 percent of the transfers seeing these areas as good or very good.

- The transfer graduates are more likely to be satisfied or very satisfied with CPCC than are the career graduates. The level of satisfaction increases from specific aspects about the college to broad aspects – 74.0 percent of the transfers are satisfied or very satisfied with CPCC preparation for transfer, 91.9 percent satisfied or very satisfied with CPCC programs, and 95.6 percent satisfied or very satisfied with CPCC overall. As with the career graduates, the vast majority of the transfer graduates (94.2%) indicated they would recommend CPCC to their friends.

- Compared with 1993's current curriculum students and the 1989-90 graduates, the 1991-92 and the 1992-93 transfer graduates assigned higher scores to all areas of services and facilities.

- Service areas which received high scores on quality from one group of the graduates or current students also received high scores from other groups. Relatively speaking, the perceived quality of most areas was stable across the different groups. Quality of instruction and availability/help of instructors always received the top ratings.

Important Factors Determining Graduate Perception of Overall Quality of the College

- Controlling for several demographic and background variables, the relationship between each area and overall quality was estimated. Availability of instructors and major course content were found to be the most important factors influencing the perception of overall quality of CPCC; quality of counseling, business office/cashier, and food services were also related to the graduates' overall satisfaction with CPCC.

- Parking received the lowest score from the most graduates and current students, but both *Graduate Follow-up Study* and *Current Student Opinion Study* estimated that parking was not related to student overall satisfaction with CPCC; no respondent considered parking as an important area needing improvement at CPCC.