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ABSTRACT

College outcomes assessment data and data collection plans for the future are presented in this report on Pueblo Community College's (PCC's) progress in implementing its 1991 Revised Accountability Plan. Following introductory sections, information is presented on changes made as the result of assessment efforts, activities to disseminate assessment results, methods used to inform students of outcomes expectations, costs, minority students' withdrawal rates and achievement, and concerns of the Colorado Council of Higher Education about PCC's 1990 progress report. The next section of the report presents charts covering goals assessed, method of assessment, validation process, student outcomes, and program changes for general education areas and 24 disciplines. In addition, retention and course, program, and degree completion data, information on alumni and student satisfaction, and after-graduation performance are presented. The next sections focus on changes in reporting plans and methods that differ from the accountability plan; evidence of faculty involvement and institutional commitment; developmental studies and General Equivalency Degree preparation; outreach, business, and community services; and student support services. In many areas, future assessment plans are noted. Appendixes provide background data on reasons for PCC school and course withdrawals in 1990, degrees and certificates awarded, headcount, ethnic breakdowns of native and transfer students, a comparison of degree goals with degree attainment, post-remediation performance, basic skills by ethnicity, and pass rates for certification exams. (MAB)

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Accountability Progress Report

Academic Year

1990-1991

Pueblo Community College

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*** TO BE ATTACHED TO THE FRONT OF ALL DRAFT AND FINAL ACCOUNTABILITY REPORTS**

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INTRODUCTION

The third year progress report is submitted by Pueblo Community College to document the results of its Accountability Plan. Representative faculty, administrators, and advisory committee members were informed and involved in the assessment process. The report focuses upon the goals and objectives listed in the Revised Accountability Plan 1991 submitted to CCHE for approval, and it follows the format recommended by CCHE in July 1991.

BRIEF SUMMARY OF PUEBLO COMMUNITY COLLEGE'S ACCOUNTABILITY PROGRESS REPORT, 1990-91

A variety of assessment methods was used to measure student progress including pre- and post-tests, competency-based instruction, external evaluators, industry-validated exams, business/industry standards, interviews by advisory committees, job placement, employer surveys, diagnostic and final writing samples, videotaped speeches, results from internships and cooperative workites, grades as related to course syllabi, transfers to four-year institutions, follow-up on students who initially took college-preparatory courses, and national, regional, and state examinations.

A comparison of follow-up data (1989-90 to 1990-91) on students who initially took college preparatory courses indicated the following success rates:

College-Level English:

<u>1989-1990</u>	Minority	Average
90%	83%	87%
<u>1990-1991</u>	80%	83%
84%		

College-Level Mathematics:

<u>1989-90</u>	Minority	Average
73%	70%	72%
<u>1990-1991</u>	89%	80%
74%		

In programs designed for students who wish to transfer to four-year institutions, the Collegiate Assessment of Academic Proficiency (a nationally-standardized exam) was used as an assessment measure. PCC freshmen and sophomores were compared to all freshmen and sophomores at two- and four-year colleges, nationally, and PCC students scored at or above the national mean in all areas as shown in the following data:

<u>Areas tested</u>	<u>PCC mean</u>	<u>Natl. mean</u>
Mathematics	57.4	55.8
Science	61.7	58.7
Communications	64.9	61.1
Humanities/ Soc Science	68.8	58.4
Critical Thinking	64.6	60.5

Most students in health programs received their licensure. Student outcomes for discipline-specific programs were outstanding.

-- Dental Hygiene, 96%; Nursing, 97%; Occupational Therapy Assistant, 100%; Physical Therapist Assistant (new program, no score); Respiratory Care*, 0%; Radiologic Technology, 86%. Registry/certification exams were the assessment measure.

* The low enrollment in the program has led the institution to review the curriculum and to monitor student progress. A self-study has been forwarded to the Joint Review Committee on Respiratory Therapy who will visit the institution in February 1992.

-- In Business-Related and Technical/ Trades Programs student outcomes

were determined by using competency-based instruction as defined by industry standards. Three levels of performance were used: mastery, greater than 90% accuracy at tasks; intermediate, greater than 80% accuracy; minimal, greater than 70% accuracy. The 1990-91 results were as follows:

<u>Program</u>	<u>Mastery</u>	<u>Intermediate</u>	<u>Minimal</u>
Accounting	40%	40%	20%
Auto Body Repair	53%	4%	43%
Auto Technology**		(no data)	
Business Mgmt	80%	19%	1%
Business and Office Tech.	36%	53%	10%
Computer Information Systems	54%	0%	23%
Drafting	60%	20%	10%
Electronics	51%	26%	17%
Farm/Ranch Management	86%	14%	0%
Food Service Mgmt	100%	0%	0%
Machining	46%	31%	23%
Welding	36%	36%	17%

** Instructor resigned and left no records.

-- Since 1984-85 the Criminal Justice Program has increased from approximately 20 students (1984-85) to over 700 (1990-91). The program has a 90% job-placement rate with students being offered positions prior to graduation. Using pre- and post-tests as an outcome measure, there was a 31%

gain in knowledge and skills. Due to the nationally-recognized Criminal Justice Academy, requests for training have come from Arkansas, Arizona, Florida, Georgia, Oklahoma, and Texas.

PCC monitored retention and completion through surveys which indicated reasons for student withdrawal. The College experienced an overall 95.4% rate of retention. Of the 4.6% that withdrew (454 students), the following reasons were cited: academic problems, 1%; administrative drop, 3%; financial problems, 13%; health/family problems, 11%; personal reasons, 29%; and other reasons, 43%.

Assessment of alumni/student satisfaction, according to AY 1990-91 surveys, was as follows: 96% rated instruction as good or very good; 89% stated services received through Student Services were good or very good. Job placement was 90% or above except in Machining (86%) and Welding (83%).

In its Revised Accountability Plan 1991, the College has incorporated additional measurement tools to include portfolio assessment and case studies. More emphasis will be given to group and decision-making activities, critical thinking, ethics, values, and integrating academics with vocational education.

ANSWERS TO CRITERIA QUESTIONS

QUESTION #1: Changes Made as a Result of Assessments

Following an analysis of the assessment data, faculty made the following program changes:

- + Accounting--Fall 1991, will rewrite curriculum to address need to increase number of students reaching mastery level of accounting concepts.
- + Automotive Body Repair--Fall 1991, make changes on weekly job sheets to assess critical thinking and basic math skills; add industrial auto body applications to curriculum.
- + Business Management--Fall 1991, use case studies to teach critical thinking, ethics and values.
- + Business and Office Technologies--Released four faculty to work in business and industry. Fall 1991, more emphases on written and oral assignments, group and decision-making activities. Investigate development of fast-track courses in legal research and medical coding.
- + Computer Information Systems--Revised curriculum, goals and objectives in keeping with input from advisory committee.
- + Criminal Justice--Fall 1991, develop program core exam, validated by Colorado Correctional Training Consortium. Assess growth in critical thinking, ethics, and values.
- + Dental Hygiene--Changed amount and depth of immunology in microbiology components of curriculum.
- + Drafting--Fall 1991, strengthen instruction in design sketches and architectural plans for residential structures. Review all curriculum by comparing industry-defined standards with goals and objectives.
- + English and Communications--College Preparatory: Fall 1991, rewrite tests to make them more challenging, include more difficult practice exercises, improve mastery through retesting. College-Level Composition: Fall 1991, more in-class writing. College-Level Reading: Begin use of commercial software "Hooked on Phonetics."
- + Electronics--Fall 1991, add software exercises to solid-state analysis and more computer-aided instruction, more emphasis on critical thinking, ethics, and values.
- + Farm and Ranch Business Management--Fall 1991, strength instruction in projected cash flows.
- + Food Management, Production and Services--Fall 1991, through advisory committee, revise curriculum and improve measures of student outcomes.
- + Humanities--Fall 1991, Investigate feasibility of adding two new courses: Studies in Ethnic Diversity and An Introduction to the Humanities. Include more in-class writing, place greater emphasis on ethics and values in each humanities course.
- + Machining--Revised curriculum to reflect industry-defined technological advances.
- + Mathematics--Fall 1991--Instructors and advisory committee will review college preparatory course curriculum to improve post-test scores. For college-level courses, evaluate test results, course content for better student success. Review MAT 113 for reasons for low student success.
- + Nursing, ADN--Rewrote curriculum because of the separation from the Otero Junior College Consortium. Curriculum changes made to address Board's addition of three new areas to the Board exam.
- + Nursing, LPN--Fall 1991, review results of April 1990 test with faculty and



State Board of Nursing to determine weaknesses.

- + Nursing. Psychiatric Technician--Curriculum updated to Colorado State Board requirements and approved by State Board of Nursing. Reduced medical-surgical nursing credit hours. Fall 1991, curriculum will be revised to reflect identified needs.
- + Nursing. Surgical Technology--Fall 1991, provide tutoring to students throughout academic year. Supplemental Services will give certification exam review.
- + Occupational Therapy--Revised six curricula to address weaknesses identified by Advisory Committee.
- + Radiologic Technology--Fall 1991, performance and behavior assessments to be rewritten to follow Radiographic Task Inventory of ARRT.
- + Respiratory Care--Fall, 1991, because of identified weaknesses, the future of the program is under review and evaluation.
- + Science--Fall 1991, expand Geology curriculum, make curricular changes based on review of related courses.
- + Social Science--added the course "The World of Work" for the purpose of integrating academics with vocational education.
- + Welding--Fall 1991, more lab time and more preparation time will be used in

the gas metal arch welding process since 50% of the students failed these performance tasks.

- + Student Services--Fall 1991, investigate the feasibility of implementing a wellness program in order to address the high dropout rate due to illnesses.
- + Developmental Studies and GED Preparation--Fall 1991, track GED students who enter PCC college-level courses, both minority and non-minority, to determine success level.

QUESTION #2: Evidence of Continuing Examination and Redefinition of Goals

Faculty and staff developed the 1988 Accountability Plan and made revisions to that plan during AY 1990-91. Major changes and improvements were made in the way individual programs assess student outcomes. These included using national exams (CAAP), external evaluators, competency-based instruction, portfolio assessment, pre-tests/post-tests, test banks, and business and industry standards. The Revised Accountability Plan for Pueblo Community College was approved by SBCCOE at the September 1991 Board

meeting. Approval is sought by the Commission at its October 1991 meeting.

Monthly, an accountability task force committee met to assess the status, review measures and assessments, make recommendations, plan strategy, and monitor the progress of the Accountability Progress Report. Faculty, department chairs, and deans collectively addressed goals and objectives at their monthly meetings.

A PCC representative served on the System Accountability Technical Committee. PCC representatives attended all meetings called by CCHE and CCOES to discuss criteria and format for accountability reporting purposes. This information was also disseminated at monthly division meetings.

In addition, faculty received advice and guidance on curriculum, goals, and objectives from program advisory committee members. To assure proper sequence of knowledge and skills and to maintain coherence within the certificate and degree programs, the individual departments reviewed their goals, objectives, and course syllabi and scheduled courses accordingly. Each course had a syllabus which identified the knowledge and skills to be achieved and established standards of performance. During AY 1990-91, every faculty member for each course taught followed the syllabi which were approved by the Curriculum

Committee and filed in the Learning Center and division offices.

QUESTION #3: Disseminating Assessment Results

The College President distributes assessment results to the CCCOES, College Advisory Council, and the College community. CCCOES provides CCHE and legislators with the results. Program chairs report the results to respective faculty and advisory committees. Students are informed through the Student Senate, and students and the public can review the completed document which is on file in the Learning Resources Center.

QUESTION #4: Informing Students of Outcomes Expectations

The institution informs its students through multiple publications and bulletins: class hand-outs, Student Handbook, College catalog, and building bulletin boards. The catalog and course syllabi identify expected outcomes for all certificates and degrees, the method of assessment, and prerequisites. Advisors play a major role in outlining student expectations as they fill out planning sheets for their advisees. Each student is issued a course syllabus for each of his/her classes.

QUESTION #5: Financial Statement

<u>Personnel Cost</u>	
Administrative and Support Services Staff	\$20,000
Support Staff	6,000
Instructional Administrators	25,000
Department chairs and faculty	40,000
Testing Center	2,500
<u>Travel</u>	200
<u>Other Costs</u>	
Printing	1,500
Surveys and Tests	8,500
Supplies and Materials	1,500
Computer Time	2,500

TOTAL ESTIMATED COSTS \$107,700

QUESTION #6: Minority Student Data

Over the past three years, between 28.7 percent and 30.7 percent of the total number of PCC degree and certificate graduates were minority students (refer to charts on pages vi-viii). Even though the total unduplicated student head count at PCC remained reasonably constant with approximately 32% minorities enrolled in years 1988-89, 1989-90, and 1990-91 (refer to charts on pages iv-v), a trend is evident;

a slightly proportionately lower number of minority students are graduating from PCC as compared to non-minority students.

To explain this trend of fewer minority graduates, the college compared the following:

1. Minority/Non-minority Withdrawal Reasons
A greater number of minority students are leaving college because of health and personal/family reasons (see chart on page xvi). The college is responding to this trend by supporting a minority hiring initiative to increase the number of minority faculty role models and by investigating the feasibility of a wellness program.

2. Success Rates of Students Taking College-Level English and Mathematics Courses after Completing College-Preparatory Courses

The trends here appear to be very positive with respect to minority students. (See charts on pages xviii-xix.)

- a. College-Preparatory English
Both groups show increasing success rates in college-preparatory English classes over the past three years; however, minority students are still six percent less successful than non-minority students.

- b. **College-Level English**
Trends for this course are the same for minority and non-minority students with both groups dropping slightly in success level due to a change in the curriculum. During AY 1989-90, the success rate of minority students was 7 percent less than the success rate of non-minority; this disparity was reduced to 4 percent during 1990-91.
- c. **College-Preparatory Mathematics**
Both groups decreased in success rate very slightly (only 2%) and the difference in success rate between minority and non minority remained constant at about four percent.
- d. **College-Level Mathematics**
The minority population showed a significant gain in success rate (31%) while non-minority students gained only two percent. Through this gain, minority students became 15 percent more successful in college-level mathematics after taking college-preparatory mathematics than non-minority students.
In AY 1991-92 the College will compare the drop rates of minority vs non-minority students to verify the success rates of students taking college-level courses after completing college-preparatory courses. The College will compare minority and non-minority scores on the Basic Skills Assessment to find additional skill level trends.
3. Success of High Risk Students
During AY 1990-91, 1,264 PCC students were identified as "high risk." Of this number, 575 were minority. The number of "high risk" students successfully completing college preparatory or college-level courses was 1,080 (earned grades of A-D); (78%) of the minority students were successful compared to 92% of non-minority students.
4. Data on CAAP by Minority
(See chart on page 17.) A comparison between performance of minority student with non-minority students on the CAAP exams revealed the following gains or losses in scores from the beginning of Fall 1990 (pre-test) and the end of Spring 1991 (post-test):
- Math--non-minority students' scores increased 2.6%; minority, decreased .4%
 - Algebra--non-minority students' scores increased 1.8%; minority, decreased .3%
 - Science reasoning--non-minority students' scores increased 3.5%; minority decreased 1.5%
- Communications, Reading--non-minority students' scores increased 4.1%; minority increased 1.2%
 - Communications, Writing--non-minority students' scores increased 3.3%; minority decreased 1.1%
 - Communications, Rhetoric--non-minority students' scores increased 1.7%; minority decreased .7%
 - Communications, Usage and Mechanics--non-minority students' scores increased 1.5%; minority decreased .3%
 - Humanities, Art and Literature--non-minority students' scores increased 1.6%; minority increased 1.7%
 - Social Sciences--non-minority students' scores increased 3.4%; minority increased 8.4%
5. Degrees and Certificates Granted
With respect to completion of degrees and certificates, both minority student and non-minority student trends are toward an insignificant change in the numbers of students obtaining degrees; yet, there is a decrease in the number of students obtaining certificates. (See chart on page iii.)

QUESTION #7: Concerns of CCHE Regarding 1990 Progress Report

A. Grades are not an acceptable measure, nor is completing courses (except for retention information.)

Grades are minimally used as an assessment measure by PCC programs. The Revised Accountability Plan 1991 has replaced a generic assessment of student outcomes (previously handled by entrance and exit essays written by students) with assessments identified as appropriate for each program. These assessments now include such measures as portfolios, external evaluators, state and national examinations, competency-based instruction, pre- and post-tests, successful transfers to four-year institutions, job placement, and surveys of current students, graduates, and employers of graduates.

B. How does passing English, math and reading courses (or pre- and post-test) measure increases in critical thinking and values?

A random sample of AA, AS, AGS, and AAS students now take the Collegiate Assessment of Academic Proficiency (CAAP) as a pre- and post-test measure. This test also measures critical thinking ability in general education. Discipline-specific programs of study have implemented (or will FY 1991-92) measures to assess critical thinking, ethics, and values. Values, according to the literature, change too slowly for the college to measure; however, every program now has in place a component within the curriculum that helps students with value clarification and teaches professional ethics. In addition, many programs will be including case studies covering ethics and values in portfolios assessment. The portfolios will be reviewed by external evaluators for clarity of ethics, values, and critical thinking ability. Case studies, transfer of knowledge, and problem-solving techniques are examples of measurements.

C. The affirmative action information is confusing. The purpose of this request is for the institution to compare the success of minority

students with non-minority students.

The data reported in the 1989-90 progress report did not accurately reflect student success. Measures this year include an analysis of the graduation rates of minority and non-minority students relative to total student population, (See charts on pages vi-viii) an analysis of success rates of both groups in college-level courses following the completion of college-preparation courses, (see charts on pages xviii-xix) and an analysis of the tracking of high risk students.

D. For the next report, more faculty interpretation is needed; what do faculty think of the results of measures, employer comments, etc.

With the change from a generic treatment of assessment to individualized program assessment, the faculty became very involved in the interpretation of data. Program reports were prepared by faculty, and the program changes were a result of the faculty

interpretation of data. Faculty also relied on advisory committees, employers, state and national standards, and other external experts in the field to help them evaluate the data and suggest program changes.

E. The PCC report omitted several AAS/Certificate degree areas in this (1989-90) report. Were there no graduates in those degrees last year?

There were no graduates in the following programs because the programs have been eliminated: Cosmetology, Construction Trades, Diesel Mechanics, Environmental Control Technology (Refrigeration and Air Conditioning). The Revised Accountability Plan 1991 includes one new program: Physical Therapist Assistant.

CURRENT DATA AND FUTURE ASSESSMENT DATA COLLECTION PLANS

GENERAL EDUCATION

AA/AS/AGS Data

The Revised Accountability Plan 1991 (page 3) lists five objectives (communication, thinking, mathematics, social science, humanities, and scientific) that prepare students for admission to the junior year at four-year institutions. The PCC programs of Humanities and Social Sciences, English and Communications, Mathematics, and Sciences prepare students for transfer in each of these areas as verified by scores attained on the Collegiate Assessment of Academic Proficiency (CAAP) Examination. (See chart on p. 17.)

Primary student outcomes are listed in the matrices and CAAP chart on the following pages. The matrices list specific program changes and future assessment plans that relate to the data gathered.

ENGLISH AND COMMUNICATIONS--COLLEGE-PREPARATORY

Goals Assessed	Method of Assessment **Major/*Supportive	Validation Process	Student Outcomes	Program Changes
Increase Knowledge	**Pre-test/Post-test	Collegiate Assessment of Academic Proficiency (CAAP)	PCC students exceeded other freshman and sophomores at public and private 2-yr. institutions in gains in knowledge and skills. (See chart page 17, xix.)	None
Develop Basic Communication Skills	**Pre-test/Post-test (Basic Skills Assessment) and an ongoing assessment of all communication classes	Developed by faculty. Test reliability and validity established through student norms.	PCC students' scores exceeded scores for other students at other public and private 2-yr. colleges. (See chart page 17, xix.)	Rewrite tests to make them more challenging. Include more difficult practice exercises. Improve mastery through retesting.
	*Student Surveys	Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	Fall 1990-62% of course completers passed post-test at a minimum score of 35 or above. Curriculum changes made prior to Spring Semester testing. Spring 1991-78% of course completers passed post-test at minimum score of 35 or above. 83% passed college-level English after succeeding in college-preparatory English. (See chart p. 17, xix.)	None

Future Assessment Plans: (1) institute a portfolio assessment
 (2) instructors' analysis of students' integrity in composition courses
 (3) surveys of students to determine ability to do jobs in community
 (4) compare drop rates of minority vs non-minority students to verify success rates of students taking college-level courses after completing college-preparatory courses



ENGLISH AND COMMUNICATIONS--COLLEGE-LEVEL COMPOSITION

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Pre-test/Post-test	Collegiate Assessment of Academic Proficiency (CAAP)	PCC students' critical thinking, writing, essay, and rhetorical scores above national norms. (See chart on page 17.)	None
Increase writing skills	**Diagnostic and Final Writing Samples *Student Surveys	Interdisciplinary faculty committee Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	Average student improvement was 2.6 on a 5-point scale with 5 as high. Note: Those at high end of scale showed little improvement and, consequently, lowered the improvement index. Students' perceptions of composition course was 4.2 on a 5-point scale with 5 as high. Students' perceptions of English course was 4.1 on a 5-point scale with 5 as high. Students' perceptions of their gains in critical thinking was 4.1 on a 5-point scale with 5 as high. This was validated by scores on CAAP.	More in class writing None
	*Instructor Survey	Developed by program faculty to report incidents of plagiarism	Only 4 incidents of plagiarism reported in 22 sections of composition.	None

Future Assessment Plans: (1) institute student portfolios (AY 1991-92)



ENGLISH AND COMMUNICATIONS--COLLEGE-LEVEL READING

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Pre-test/Post-test	Collegiate Assessment of Academic Proficiency (CAAP)	PCC students performed above national average on tests including critical thinking. (See chart page 17.)	Begin use of commercial software "Hooked on Phonetics"
Develop skills	**Pre-test/Post-test	Nelson-Denny Reading Test	Students placed in one of three levels of reading. Students gained an average of 1.9 grade levels by end of course. Students in lowest level of reading gained 1.08 levels while students in college-level course gained 2.35 grade levels.	Begin use of commercial software "Hooked on Phonetics"
	*Student Survey	Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	Students' satisfaction of value of reading courses index was 4.7 on a 5-point scale with 5 as high.	None

Future Assessment Plans: (1) No change
(AY 1991-92)

ENGLISH AND COMPOSITION--COLLEGE-LEVEL SPEECH

Goals Assessed	Method of Assessment **Major/*Supportive	Validation Process	Student Outcomes	Program Changes
Increase in knowledge	**Video taping of student speeches	Random Sample reviewed by interdisciplinary faculty committee.	Average score was 3.5 on a 5-point scale with 5 as high.	None
Develop skills				
Student perception of value of speech courses	*Student Survey	Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	Students' perception of value of speech courses was 4.7 on a 5-point scale with 5 as high.	None
<p>Future Assessment Plans: (1) use of journals to assess gains in knowledge and skills in listening and speech analysis (AY 1991-92) (2) instructor analysis of students' integrity in speech courses</p>				

HUMANITIES

Goals Assessed	Method of Assessment **Major/*Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Pre-test/Post-test	Collegiate Assessment of Academic Proficiency (CAAP)	The mean score for PCC Arts/Literature students increased from 15.8 to 17.4. The mean score for all sophomores nationwide is 15.6.	Add 2 new courses to address ethics, values, and critical thinking: a. Studies in Ethnic Diversity b. An Introduction to the Humanities
Increase related skills				Include more writing assignments in all courses Place greater emphasis on ethics and values in each humanities course
<p>Future Assessment Plans: (1) begin a student self-assessment (AY 1991-92) (2) begin portfolio analysis by interdisciplinary faculty team (3) assessment of gains and knowledge in telecourses</p>				

MATHEMATICS--COLLEGE PREPARATORY

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
<p>Increase knowledge</p> <p>Develop math skills</p> <p>Meet community needs</p>	<p>**Pre-test/Post-test</p> <p>Employers and former students</p>	<p>PCC Basic Skills Assessment developed by instructors. Test reliability and validity established through student norms.</p> <p>Survey of employers and former students</p>	<p>1,293 students placed in preparatory courses based on pre-test. 77% of students satisfactorily (passed minimally 6 of the 8 modules of the 10 math learning materials) completed the course. (See chart page xviii for student success (80%) in college-level courses following completion of college-preparatory courses.)</p> <p>100% of employers and former students surveyed expressed satisfaction</p>	<p>Math instructors and Advisory Committee will review college preparatory course curricula to improve post-test scores.</p> <p>Evaluate test results, and student success in future math courses, and monitor students' evaluations of course content.</p> <p>None</p>

Future Assessment Plans:
(AY 1991-92)

- (1) student survey of course relevancy, textbook correlation, appropriateness of infusion of values and ethics into curriculum
- (2) interdisciplinary committee to review all assessments analyze results and determine necessary curricular changes
- (3) ongoing assessment at course level to compare progress to syllabi goals and objectives
- (4) survey of students enrolled in courses to meet community needs
- (5) compare drop rates of minority vs non-minority students to verify success rates of students taking college-level courses after completing college-preparatory courses

MATHEMATICS--COLLEGE-LEVEL COURSES

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Pre-test/Post-test random sample of AA, AS, AGS students.	Collegiate Assessment of Academic Proficiency (CAAP)	PCC students' scored at the national average in mathematics and algebra. (See chart on page 17.)	Math instructors will review Math 113 curriculum and make necessary changes to improve student outcomes.
Develop skills	***Pre-test/Post-test at individual course level Ongoing assessment at individual course level to compare performance to published objectives and goals in syllabi Course syllabi goals and objectives	Addison-Wesley exams and exams developed by faculty	Gains in knowledge and skills between pre-test and post-test scores: MAT 111-59.3% gain MAT 112-31.2% gain MAT 113-17.1% gain MAT 155-44.1% gain College level (116, 117, 121, 135)--43.9% gain	Math instructors will review Math 113 curriculum and make necessary changes.
		Curriculum Committee	Above competency level achieved (70% succeeding minimally) Percent reaching acceptable and above MAT 111-71.4% MAT 112-80% MAT 113-75% MAT 155-79.3% College level (116, 117, 121, 135)--82.6%	No changes

Future Assessment Plans: (1) a random survey of students to assess infusion of ethics and values, relevancy of textbook and course syllabi (AY 1991-92)
 (2) externally developed placement exam
 (3) a random sample to measure matching course content with performance on job
 (4) external committee analyzing student growth in critical thinking and ethics

SCIENCE				
Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge in Biology Chemistry Physics	**Pre-test/Post-test (science courses, reading comprehension, critical thinking)	Collegiate Assessment of Academic Proficiency (CAAP)	PCC students tested above national average. (See chart on page 17.)	Expand Geology curriculum
Develop skills in Biology Chemistry Physics				
Ongoing assessment comparing student performance with course syllabi	*Course Syllabi Goals and Objectives	Exams developed by instructors using test banks Mastery level- 90% objectives met Acceptable level- 70% objectives met.	Biology-36% of students reach mastery and 53% reach acceptable level (total-83%) Chemistry-41% of students reach mastery level and 41% reach acceptable level (82% total) Physics-45% of students reach mastery level and 35% reach acceptable level (80% total)	Make curricular changes based on review of related courses
New area of Geology to be assessed in 1991-1992	*Student Satisfaction Survey **Pre-test/Post-test'	Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist Collegiate Assessment of Academic Proficiency (CAAP)	Student satisfaction is 4.4 on a 5-point scale with 5 as high on student satisfaction survey instrument PCC students tested above national average. (See chart on page 17.)	None Expand Geology curriculum
Future Assessment Plans: (1) randomly assess students; prepare critical thinking exam (AY 1991-92) (2) assessment, statistically, or ethics and moral values				

SOCIAL SCIENCE

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
<p>Increase knowledge</p> <p>Increase in related skills</p>	<p>**Pre-test/Post-test</p>	<p>Collegiate Assessment of Academic Proficiency (CAAP)</p>	<p>The mean score for PCC Social Science students increased from 15.6 to 17.9. The mean score for all sophomores nationwide is 15.7</p> <p>The mean score for PCC students in critical thinking increased from 62.1 to 64.6. The mean score nationwide is 62.5.</p>	<p>Add one new course "The World of Work" for the purpose of integrating academics with vocational education</p>
<p>Future Assessment Plans: (1) use more writing in classes (2) begin portfolio analysis by an interdisciplinary faculty team (3) assessment of gains and knowledge in telecourses</p>				

COLLEGIATE ASSESSMENT OF ACADEMIC PROFICIENCY (CAAP) SUMMARY

MEAN SCORES

DISCIPLINE	PCC FALL--1990				PCC SPRING--1991				NATIONAL 2-YEAR NORMS									
	ALL		NON-MINORITY		ALL		NON-MINORITY		ALL		2-YR PUB FR		2-YR PUB SO		2-YR PRI FR		2-YR PRI SO	
	ALL	NON-MINORITY	MINORITY	ALL	NON-MINORITY	MINORITY	ALL FR	ALL SO	2-YR PUB FR	2-YR PUB SO	2-YR PRI FR	2-YR PRI SO	NO DATA	NO DATA	NO DATA	NO DATA		
MATH	55.5	55.6	54.7	57.4	58.2	54.3	56.1	57.2	54.6	56.0	55.5	55.7						
MATH ALGEBRA	13.6	13.4	13.0	14.8	15.2	12.7	14.0	14.5	13.2	13.9	13.6	13.7						
SCIENCE	59.1	59.1	59.5	61.7	62.6	58.0	57.8	61.7	57.5	59.9	NO DATA	NO DATA						
SCIENCE SCI. REASON																		
COMMUNICATIONS	61.5	61.8	59.8	65.0	65.9	61.0	59.5	61.4	57.9	60.4	59.2	59.6						
COMMUNICATIONS READING	62.3	62.7	60.4	64.8	66.0	59.3	61.6	62.8	59.8	61.9	55.3	61.0						
COMMUNICATIONS WRITING	16.4	16.5	15.7	17.6	18.2	15.0	15.9	16.4	15.0	16.0	12.6	15.5						
COMMUNICATIONS RHETORIC																		
COMMUNICATIONS USAGE & MECHANICS	16.1	16.3	15.0	17.3	17.8	14.7	15.8	16.4	15.0	16.0	13.0	15.6						
HUMANITIES & SOC. SCI.																		
HUMANITIES & SOC. SCI. ARTS/LIT	15.8	16.2	14.3	17.4	17.8	16.0	14.7	15.6	13.8	15.1	14.7	14.9						
HUMANITIES & SOC. SCI. SOC. SCI	15.6	15.5	15.5	17.0	17.5	15.0	14.8	15.7	14.2	15.3	14.6	14.8						
CRITICAL THINKING	62.1	62.4	51.6	64.6	65.8	60.0	60.3	62.5	58.7	61.3	53.7	59.9						

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DISCIPLINE-SPECIFIC EDUCATION

As stated in the Revised Accountability Plan 1991, Section 5.02, Goal I, Pueblo Community College will meet the occupational goals of youth and adults in technical and vocational fields. This goal describes six ways in which the College will accomplish this task. The charts that follow provide the data from the assessment of these goals. These are addressed individually by each program of study.

The College will be emphasizing two new objectives for this goal: 1) Accept and apply professional ethics and values; and 2) Demonstrate the ability to think critically. Many programs have added new assessments to the Revised Plan to measure these objectives. The most important measures involve presenting case studies on ethical issues and developing portfolio assessments. A committee has been formed that will monitor the progress of the portfolio and case studies assessments throughout the coming year. Program chairs from programs beginning portfolio or case studies assessment, as well as program chairs who want to investigate portfolio or case studies assessment, will meet monthly with a resident expert to discuss their progress and any problems they are encountering.

ACCOUNTING

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Course syllabi goals and objectives	Business and Industry and Advisory Committee	40% reached mastery level (90% proficiency) 40% reached intermediate level (80% proficiency) 20% reached minimal level (70% proficiency)	To increase number of students reaching mastery level, will review curriculum with Advisory Committee, identify weaknesses, and make necessary curriculum changes
Increase accounting skills	**Internship and Cooperative Training **Simulations *Telephone Surveys • Employers • Alumni • Students	Employers and Advisory Committee Commercially developed software Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	100% of students met industry standards 100% of students met industry standards 90% of employers satisfied 85% felt instruction was relevant 90% alumni working in the field (3 of 4 working full time) 90% students satisfied with instruction	Will introduce more "real world" accounting problems None None None

Future Assessment Plans: (1) Advisory Committee to interview sample of students to determine if they meet industry standards
(2) Job placement statistics of graduates will be used to assess student outcomes
(3) Advisory Committee to assess students' ability to think critically

AUTOMOTIVE BODY REPAIR

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge and skills	**Competency-based curriculum	Colorado State Technical Committee for Auto Body Repair	100% of students reached 70% proficiency (53% reached 90% level) (4% reached 80-89% level) (43% reached 70-79% level)	All tests being placed on computer for scantron grading Make changes on weekly job sheets to assess critical thinking and basic math skills
Auto Body Industry validated post-test	Auto Body Industry validated post-test	Scarf Associates with information supplied by Inter-Industry Conference on Auto Body Collision Repair, Toyota, Nissan, Chrysler, etc.	97% of students reached 90%+ proficiency 2% reached 80-89% proficiency 1% reached 70-79% proficiency	
Meet community needs	**Post-tests industry certification	Meet industry-identified standards Auto Body Advisory Committee validated post-tests	86% of I-CAR students completed entire I-CAR certification program, meeting industry standards 14% took special segments of program and received I-CAR certificates	Industrial auto body applications will be added to the curriculum

Future Assessment Plans:
(AY 1991-92)

- (1) use new section on weekly job sheets to assess critical thinking and basic math skills
- (2) portfolios to be assessed by committee of instructors, department chair and Advisory Committee
- (3) student and employer surveys to measure satisfaction with knowledge and skills gained in program areas
- (4) measure critical thinking through "estimating" and weekly job sheets
- (5) use of portfolios
- (6) integration of basic math by evaluating weekly job sheets
- (7) communication skills through weekly written reports and portfolio

AUTOMOTIVE TECHNOLOGY				
Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
Instructor retired. Data for report unavailable Instructor took all records	Competency-based instruction	Oklahoma State University and Colorado State Technical Committee and Automotive Technology Advisory Committee	Not available	Not available
Future Assessment Plans: (AY 1991-92) (1) competency-based curriculum (2) portfolio assessment by committee of instruction, department chair and Advisory Committee (3) student and employer survey to measure satisfaction with knowledge and skills gained (4) measure critical thinking through weekly job sheets (5) integration of basic math by evaluating weekly job sheet (6) communication skills through weekly written reports				

BUSINESS MANAGEMENT				
Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Post-test	South Western Publishing Co. Irwin Harcourt Test Bank	50% student attain mastery level (90% proficiency) 43% students attain intermediate level (80% proficiency) 7% student attain minimum level (70% proficiency)	To increase number of students reaching mastery level, will review curriculum with Advisory Committee, identify weaknesses and make necessary changes
Develop management skills	**Post-test	Employers and Advisory Committee members	80% of students at mastery level (90% proficiency) 19% of students at intermediate level (80% proficiency) 1% of students at minimal level (70% proficiency)	None
Courses for non-mgmt majors	**Internship and Cooperative Training Placement Employer and student demand	Business employers	100% met industry standards	None
	*Telephone surveys • Employers • Alumni • Current Students	Norms established through repeated use; student achievement of skills Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	100% students attained required skill	None
	*Job Placement Survey of 90-91 Graduates	Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	95% employers were satisfied 85% felt instruction was relevant 90% satisfied with instruction 80% working in their field 12 surveyed 2 transferred to 4-yr. institutions 2 looking for full-time employment 7 employed full time (5 in field) 1 not seeking employment	Implement more critical thinking, ethics, and values in the introductory course through case studies None

Future Assessment Plans: (1) Advisory Committee to interview sample of students to determine if they meet industry standards
(2) measure critical thinking through use of a "business plan"
(3) use of case studies to measure critical thinking, ethics, and values

BUSINESS AND OFFICE TECHNOLOGIES

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Post-test Sample of 479 students in beginning, intermediate and advanced level classes	Business and industry standards as validated by Advisory Committee	29.9% of students exceeded industry standards (7.5% minority; 22.4% non-minority) 57.2% met industry standards (27.3% minority; 29.9% non-minority) 12.9% unable to meet standards (6.3% minority; 6.6% non-minority) 37% of the enrollees were minorities	More emphasis on written and oral assignments, group activities, and decision-making activities. Train faculty to the above emphases.
Develop secretarial, clerical, and decision-making skills	**Post-test Sample of 234 students in beginning, intermediate and advanced level classes	Business and industry standards as validated by Advisory Committee	Beginning students (composition) 37% exceeded industry standards (11% minority; 26% non-minority) 52.6 met industry standards (24.5% minority; 28.1% non-minority) 102.% performed below industry standards (6.6% minority; 3.4% non-minority)	Four of six faculty participated in business/industry training and made program changes Continue to release faculty to work in industry to gain experience necessary to make curriculum changes Advisors will monitor basic skills assessment scores and use scores to complement level of class enrollment
*Job simulations and case studies *Interview of graduates	*Job simulations and case studies *Interview of graduates	Advisory Committee and departmental faculty Conducted by Advisory Committee using industry standards	Intermediate student activities 23% exceeded industry standards 63% met industry standards 13% performed below industry standards (42% in intermediate activities were minorities) Course withdrawal rate 27.3% (duplicated head count) 87% successfully completed industry standards	None None None

BUSINESS AND OFFICE TECHNOLOGIES

Goals Assessed	Method of Assessment **Major/*Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	*Employer Survey	15 employers were randomly selected	100% students' reading and writing skills met industry standards 100% students' informal communication skills met industry standards 99.4% students' professional ethics met industry standards; 6% involved in office gossip Of the 15 graduates, 12 (or 80%) were rated "outstanding" in office skills; 3 (or 20%) as "satisfactory"	None
Develop secretarial and clerical skills	*Employment Survey	Telephone survey of all 1990-91 graduates	100% employed or in college	None
Meet community needs	**Industry special skills classes Student Survey	Certified Professional Secretaries Informal telephone survey (randomly selected) of 16 1990-91 graduates	Certified Professional Secretaries Review of sections for exam. 100% passed section they reviewed and in which they were examined. Students stated they met their goals for the course; 15 were employed in job-related work; 1 was continuing education.	None Possible development of fast-track course for Department of Social Services in legal research and medical coding
<p>Future Assessment Plans: (AY 1991-92)</p> <ol style="list-style-type: none"> (1) use case studies to assess gains in critical thinking, ethics, and values (2) identify and use an external measure in addition to Advisory Committee and employer/student follow-up (3) provide for personal contact and follow-up with those withdrawing to assess reasons (4) survey industry to see if standards are being met (5) personal contacts and follow-up surveys of students (6) Advisory Committee will revise curriculum and develop employer and student survey instruments 				



COMPUTER INFORMATION SYSTEMS

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Internships	Industry employers	4 of 5 performed above average or at the excellent level	None
Develop computer programming and critical thinking skill	**Comprehensive Project (Implemented later as internships)	Faculty and employers	7 out of 13 enrolees performed above average; 3 met minimal level; 3 failed	Revise curriculum, goal, objectives
Develop skills in using personal computer application	**Final projects to measure team approach *Student Surveys and Credit Courses	Faculty and employers Developed by a committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	27 of 33 completed successfully All attribute employment success to PCC training. 93% reported increase in knowledge. 74% met or exceeded learning expectations	None
Meet community needs	*Student Interview *Student Survey	Random sample of students interviewed by Advisory Committee Developed by a committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	All students reported gains in knowledge. All reported learning of copyright laws and ethics in several courses. All increased knowledge and found course beneficial. All met or exceeded learning expectations.	None None

Future Assessment Plans: (1) use of application and programming problems to measure critical thinking, ethics, and values
 (2) use of case studies to solve (critical thinking) business problems
 (3) use industry-representatives to conduct workshops on values, ethics, copyright laws, and employee rights; employers assess gains in skills
 (4) use an external assessment to measure gains in knowledge and skills



CRIMINAL JUSTICE DEPARTMENT

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
<p>Knowledge of criminal justice system</p> <p>Courses to advance in corrections, enforcement, adult and juvenile detention facilities</p>	<p>**Pre-test/Post-test of each course</p>	<p>Test bank questions selected from prior four years of tests and normed</p>	<p>Pre-test students on average answered 45.7% of questions correctly.</p> <p>Post-test students on average answered 76.6% of questions correctly.</p> <p>Average gain was 30.9%.</p>	<p>Develop new exam from program core, teach and assess growth in critical thinking ethics and values. Will be validated by Advisory Committee and Colorado Correctional Training Consortium Senior Law Enforcement Officers</p>
<p>Improve-ment in agency field placements performance</p>	<p>**Cooperative Work Experience</p>	<p>Criminal Justice personnel/practitioners and potential employers Rating scale of excellent, good, average, below average, and unsatisfactory</p>	<p>From a total of 20 students: Excellent-17 students Good-3 students (5 hired by cooperative agencies following co-op experience)</p>	<p>None</p>

Future Assessment Plans: (1) external assessment such as professional criminal justice personnel assess work assignments, student strengths and weaknesses, student knowledge of subject matters, critical thinking, values and practice of national policies and correctional ethical values



DENTAL HYGIENE

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge of theory	**Post tests (national and regional examinations)	National Board of Dental Hygiene Examination	11 of 12 (92%) passed National Board Exam; national failure rate as 8.3%.	Changed amount and depth of immunology in microbiology component of curriculum
Develop clinical skills	**Competency-based (measures knowledge, skills and problem solving)	Central Regional Dental Testing Service Clinical Examination Each task must be performed minimally at 80% level. Students' didactic knowledge and clinical skills assessed. Validated by national accreditation.	12 of 12 (100%) passed at competencies at 80% level or better.	None
	*Employment Survey	Developed by instructors	100% (12 of 12) of graduates employed in profession.	None
	*Graduates' Survey	Developed by instructors	89% response rate 88% felt adequately prepared for job 12% felt overtly prepared for job All recommended PCC program.	None
	*Employer Survey	Developed by instructors	66% response rate; all reported graduates adequately prepared. All would hire another PCC graduate.	None

Future Assessment Plans: (1) assessment of trends in student performance
(2) employment survey, graduates' survey, employer survey to assess job readiness
(AY 1991-92)



DRAFTING

Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
Increase in knowledge in civil and manufacturing technology	**Competency-Based	Prescribed Colorado industry curriculum validated by Advisory Committee	<p><u>Civil Technology</u> 81.6% or above of the students reached minimal competency, meeting 76% of all objectives.</p> <p><u>Manufacturing Technology</u> 92.1% or above of the students reached minimal competency, meeting 76% of all objectives.</p>	Strengthen instruction in design sketches and architectural plans for residential structures
Increase in skills in civil & manufacturing technology	**Competency based	Prescribed Colorado industry standards curriculum validated by Advisory Committee	<p><u>Civil Technology</u> 78.5% or above of the students reached minimal competency, meeting 76% of all objectives.</p> <p><u>Manufacturing Technology</u> 91.6% or above of the students reached minimal competency, meeting 76% of all objectives.</p>	Assessment at individual course level by comparing industry-defined standards with course goals and objectives
<p>Future Assessment Plans:</p> <ul style="list-style-type: none"> (1) writing skills, thought processes, critical thinking, spelling and grammar assessed through written entrance and exits standards (2) use of portfolios to assess satisfactory (minimally 76% level) work performance--evaluated by employers (3) comprehensive entrance and exit exams (developed by program faculty and industry representatives) to assess job readiness and critical thinking skills (4) use of portfolios to assess critical thinking and work place ethic skills 				



ELECTRONICS TECHNOLOGY

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Competency-based Pre-test and Post-test	Industry standards validated through Electronic Advisory Committee and the Colorado Electronics Competency-Based Performance Standards	85 students enrolled in certificate and degree program Increases in Knowledge 51% met mastery-level (90 + % proficiency) 22 or 26% met intermediate-level (80-89% proficiency) 14 or 17% met minimal-level (70-79% proficiency)	More computer software exercises in solid state analysis and more emphasis will be given to computer-aided instruction.
Increase skills			Increases in Skills 36 or 42% met mastery-level (90 + % proficiency) 23 or 27% met intermediate-level (80-89%) proficiency 22 or 26% met minimal-level (70-79% proficiency)	Greater emphasis placed on communication skills, critical thinking, ethics and values. Focus on the development of ethics and values and methods of evaluation of the same.
Meeting community needs	Industry defined	Industry standards	32 students enrolled in industry-requested training 24 or 75% performed at mastery level 3 or 9% performed at intermediate level 3 or 9% performed at minimal level	None
<p>Future Assessment Plans:</p> <ul style="list-style-type: none"> (1) use of portfolio to assess gains in knowledge and skills (evaluated by Advisory Committee) (2) laboratory projects and reports to show growth in basic mathematics, communication skills, and critical thinking (AY 1991-92) (3) monitor students referred to tutoring to determine improvement in grades and retention (4) case studies to measure ethical issues 				



FARM AND RANCH BUSINESS MANAGEMENT

Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge Develop farm/ranch accounting skills	**Competency-Based	University of Minnesota commercially developed computerized software validated by Advisory Committee	100% of the students met minimal requirements (76%) or above.	None
Analyze records and evaluate financial projections	**Pre-test/Post-test	Developed by CPA's & Lenders (26% response rate)	86% of students moved from basic to advanced level (90-100%). 14% of students moved from basic to intermediate level (80-89%).	Strengthen instruction in projected cash flows Expand accounts
Meet community needs	**Journals *Informal survey of CPA's, lenders, accountants of farm or ranch records *Student Survey of Goals	Reviewed by CPA's, lenders, accountants, and instructors By instructors and industry representatives By instructors and University of Minnesota	Confidential 9 of 10 very pleased with students' progress. Identified need for more projected cash flows instruction and to expand accounts. 81% met educational goals. 69% made enterprise changes following education.	None Curriculum changes each year based on needs of students

Future Assessment Plans: (1) use of student cash flows, utilizing computer and accounting skills to measure critical thinking skills--evaluated by Advisory Committee (AY 1991-92)
(2) use of journals to measure gains in knowledge and skills--evaluated by lenders, accountants and instructors

FOOD MANAGEMENT, PRODUCTION AND SERVICES

Goals Assessed	Method of Assessment **Major**/Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge of food services and acquire production and customer service skills	**Internship	Employers	Industry supervisors verified that industry standards were met by 100% of the certificate and degree students.	Using Advisory Committee, revise curriculum to more accurately measure student performance
	**Culinary Competition	Industry Judges	100% of students met industry standards	Improved measures of student performance
	**Accountability Dinner (simulation)	Industry representatives, chefs, restaurant owners, dieticians, and college personnel	100% of students met industry standards	None
	Follow-up of students and employers	Survey instrument developed by faculty and approved by Advisory Committee	Degree Students 7 employed 2 on scholarship to Johnson and Wales University	None
			Certificate Students One employed and one seeking employment	

Future Assessment Plans: (1) formal and informal communications of public assesses quality of food and service
 (2) Advisory Committee written evaluation of students' ability to meet standards of time preparation, appearance of products, taste and techniques of presentation
 (3) assessment of critical thinking, ethics, values, written communication skills and observation through use of journals during students' internships

MACHINING

Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge and to develop skills	**Competency-based	Oklahoma State University Curriculum Service and Machining Advisory Committee	<p><u>Freshmen</u> 14.7% (5 of 34 students) reached 100% mastery 41% (20 of 34 students) reached intermediate level (80-89%) 26% (9 of 34 students) reached minimal level (70-79%)</p> <p><u>Sophomores</u> 46.2% (6 of 13 students) reached 100% mastery 31% (4 of 13 students) reached intermediate level (80-89%) 23% (3 of 13 students) reached minimal level (70-79%)</p>	Program changes suggested by Advisory Committee based on technological advances in field
Increase knowledge and to develop skills	*Case study measuring critical thinking, communication skills, and ethics *Student Survey	Instructors and Advisory Committee Members Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum, specialist	38% of freshmen at mastery level (90%-100% proficiency) 43% of freshmen at intermediate level (80-89% proficiency) 19% of freshmen at minimal level (70-79% proficiency) 70% felt knowledge obtained was relevant and met their expectations	None None

Future Assessment Plans: (1) evaluation of assessment instrument at 100% mastery not realistic. Level of competency expectations used are as follows: mastery, 100-90%; intermediate, 80-89%; minimal, 70-79%
 (2) students' attitudes, work habits, cooperativeness, enthusiasm, ability to originate and develop ideas, reliability, follow through, personal appearance, quality and quantity of work will be assessed
 (3) portfolios measuring 2 above critical thinking, communication skills and ethics
 (4) work with Customized Training Director and Advisory Committee to assess needs

NURSING--ASSOCIATE DEGREE NURSING, LEVEL II

Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
Develop knowledge base	<ul style="list-style-type: none"> *National Council Licensure Examination (NCLEX) 	Nationally normed state board licensing exam	May 1990--47 of 49 passed (96%--1991 results not available)	Board to add 3 new areas to exam. Instruction will emphasize these areas.
Develop knowledge and skills	<ul style="list-style-type: none"> *Course syllabi goals and objectives *Specified behaviors in simulated and clinical settings 	<ul style="list-style-type: none"> Standardized examination Assessment of written and practice performance Informal survey of job placement Information by department 	National Council Licensure Examination (NCLEX) pass rate. 100% pass-practicum setting 80% success rate--Pre-RN assessment test	Curriculum rewritten because of withdrawal from Otero Junior College Consortium. Changes to be implemented Fall 1991.
Meet community needs	<ul style="list-style-type: none"> *Employment Survey *Student course evaluation **Student Survey 	<ul style="list-style-type: none"> Developed by department, validated by Advisory Committee Informal 	<ul style="list-style-type: none"> May 1991--98% of graduates employed. Employer comments positive on students' job performances. Over 92% of students felt they were prepared in all areas of instruction. Identified stress of work and family as a concern when returning to college. 	<ul style="list-style-type: none"> None None Developed extended evening and weekend program to implement in Fall, 1991
<p>Future Assessment Plans: (1) develop a competency-verification record for each student (AY 1991-92)</p> <ul style="list-style-type: none"> (2) continue use of case studies and student presentations complex issues (3) develop formal employment survey for fall of 1991 (4) refine evaluation tools of ethical performance, practical skills and problem-solving abilities (5) during final semester, validate ability to provide comprehensive ethical case and to verbalize impact of value system on choices in simulated cases (6) an employment survey will be conducted to determine percent of employment of graduates 				



NURSING--PRACTICAL NURSING

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Develop knowledge base	**Licensure Exam	Colorado State Board National League of Nursing Exam (NLN)	58 of 58 (100%) of those taking exam in October of 1990 passed.	Review results of April test with faculty and State Board of Nursing to determine weaknesses
Develop knowledge and skills	**Competency-Based	Competencies set by state-wide nursing committee of nursing faculty and validated by ability to perform according to specified behaviors in clinical settings.	2 of 3 (67%) of those taking exam in April 1991 passed. 100% of student attained minimal level of proficiency, meeting all competencies at 77% proficiency and above. 27% attained 92% proficiency 54% attained 84% proficiency 19% attained 77% proficiency	No Changes
	*Post-Test	National League of Nursing Standardized Exam	Test results not available at this time.	Unknown

Future Assessment Plans: (1) assessment of ethical performance, values, skills and problem-solving abilities
(2) identify a pre-test, post-test assessment tool to measure growth in knowledge and skills

7/2

2/2

NURSING--PSYCHIATRIC TECHNICIAN

Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
Develop knowledge base	**Post-test (Simulated exercises to include problem solving, values, and ethics)	Colorado State Board of Nursing Licensing Examination for Psychiatric Technicians MI	100% of graduates passed test on first try. Test measured gains in knowledge, skills, ethics, problem solving, and values.	Curriculum updated to Colorado State Board requirements and approved by State Board of Nursing, Nov. 1990
Develop knowledge and skills	*Telephone Employment Survey	Developed by committee from Student Services, instructional division, counselors, deans, and curriculum specialist	90% of graduates fully employed in field. 10% of graduates declined employment and are continuing education.	Program reduced medical-surgical nursing hours by 4 credits Curricula will be revised reflecting identified needs
	*Student Survey	Developed by committee from Student Services, instructional division, counselors, deans, and curriculum specialist	Questionnaire was open-ended. See appendix for student comments.	None

Future Assessment Plans:

- (1) investigate a possible pre-test or tool to measure knowledge growth to augment current post-test assessment
- (2) develop a student survey instrument which can be tallied and scored
- (3) implement a survey instrument to determine community needs; then, address if results are positive

7/9

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NURSING--SURGICAL TECHNOLOGY PROGRAM

Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
<p>Develop knowledge base</p> <p>Develop and apply skills</p>	<p>**Post-test-- competency based (includes simulation exercises focusing on problem solving and ethic issues; students' critical thinking skills are evaluated through their ability to plan, implement, and evaluate the care required by individual clients; students are assessed on ethical performance and values in problem-solving roles)</p>	<p>Liaison council on certification--Surgical Technologist (national certification exam) for surgical technologists</p>	<p>13 graduates (87% of class) took Liaison Certification Council for Surgical Technology exam (LCC-ST).</p> <p>91% or 12 of 13 were successful. The exam measured knowledge, skills, problem solving and ethical issues.</p>	<p>Provide tutoring to students through academic year. Supplemental Services will give certification exam review.</p>

Future Assessment Plans: (1) investigate a base-line tool--possibly a pre-test or other tool to measure growth to augment current post-test assessment. (AY 1991-92) (2) survey graduates and employers to evaluate graduates preparation and obtain suggestions for program improvement

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OCCUPATIONAL THERAPY ASSISTANT PROGRAM

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	**Certification Exam	American Occupational Therapy Certification Board	July, 1990--10 of 11 passed (90.9%, National rate 89.7%) January, 1991--5 of 5 passed (100%, National rate 86.9%)	None
Develop occupational skills	**National Council (level II Fieldwork)	American Occupational Therapy Association's Commission on Education	95.9% passed, exceeding national pass rate of 87.2%	None
	**Accreditation Visit	National Occupational Therapy Association Committee on Accreditation	Granted accreditation for 7 years. Revealed need for priority laboratory scheduling	None--Deficiencies corrected with opening of new academic building
	*Surveys Employers Graduates	Developed by a committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist	1991 return rate not sufficient 1990 survey results: 74% employers satisfied with graduates' preparation 87% of graduates would recommend program to others 44% of graduates felt prepared for work	Addressed weaknesses in program identified through surveys and with Advisory Committee by making changes in 6 course syllabi (see appendix)
	*Job Placement Survey	Telephone and questionnaire survey	100% employed	None

Future Assessment Plans: (1) pre-test to be administered in 1991-92; test questions taken from certification exam results
(AY 1991-92)
(2) survey of clinical supervisors to evaluate student skills and curriculum
(3) student evaluation of clinical experience



PHYSICAL THERAPIST ASSISTANT

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge Develop clinical skills	**Post-test	(ASI) Assessment Systems, Inc. National Physical Therapist Licensure Examination	This is the first year of program. Data not available at this time since results have not been returned from national office.	None
	**Post-test	Commission on Accreditation of American Physical Therapy Association	100% of the 13 graduates successfully passed all skills checks in Procedures I, II, III, IV.	None
	**Clinical experience	Blue Macs Mastery Assessment of Clinical Skills given by hospital supervisors	100% of the students attained the minimal 75% or above level of proficiency required.	None
	*Employment Survey		10 of 13 (77%) employed from 1991 graduating class.	None

Future Assessment Plans: (1) on-going assessment of students' ability to fulfill course objectives at 75% (minimal) level of competence
 (AY 1991-92) (2) a post-graduation survey, mailed to employers and graduates, measuring students' application of PTA theory and application of skills will be completed
 (3) an assessment of ethical performance values and problem-solving skills will be measured

RADIOLOGIC TECHNOLOGY

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Increase knowledge	Post-test national registry written exam	American Registry of Radiologic Technologists	14 of 16 students passed (March 1991) Report showed an equal passing % rate on all 5 sections of exam.	Performance and behavior assessments to be rewritten to follow Radiographic Task Inventory of ARRT
Develop clinical skills	**Simulated Registry Exams (battery of 16)	Statewide committee of authored radiologic technology educators	16 of 17 (94%) completed with 75% or better success rate. 35% at mastery level (>93% proficiency) 41% at intermediate level (>85% proficiency level) 23% at minimal level (>75% proficiency level)	None
Critical thinking, problem-solving skills	Simulated registry exam	Statewide committee of authored radiologic technology educators	6 of 17 students (35%) met mastery level (greater than 93%) 7 or (41%) met intermediate level (greater than 85%) 4 or (23%) met minimal level (greater than 75%)	None
Knowledge of advanced procedures	*Competency-Based Clinical Education Survey *Student Survey	Registered Technologist Supervisors and faculty Developed by committee from Student Services, instructional division, counselors, instructors, deans and curriculum specialist representatives	Employers felt students performance to be adequate to superior. All rate program as good. 16 known to be employed (status of 4 not known).	None None

Future Assessment Plans: (1) comprehensive assessment measuring mastery, intermediate and minimal levels of performance of each course
(2) individual courses assessed at students' ability to perform minimally at 77% success rate
(3) comparison of PCC student performance with performance of other radiologic technology programs will be made



RESPIRATORY CARE

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
<p>Knowledge of essential concepts</p> <p>Develop clinical skills</p>	<p>**Post-tests--National Board of Respiratory Care</p> <p>**Post-tests</p>	<p>National Board of Respiratory Care (NBRC) Self-assessment examinations (3 parts)</p> <p>a. NBRC Entry-level Examination</p> <p>b. NBRC Written Registry Examination</p> <p>c. NBRC Clinical Simulation Registry Examination</p>	<p>6 of 6 (100%) passed</p> <p>0 of 2 (0%) passed</p> <p>0 of 2 (0%) passed</p> <p>2 students took exam. On the Program's Reasoning Exam, each scored in the lower one-third of the range considered acceptable for program matriculation.</p>	<p>Program under review</p> <p>Implement teaching strategies designed to teach reasoning and critical thinking</p> <p>Begin oral clinical exams evaluated by instructor and clinical affiliate representatives</p> <p>Begin oral patient case studies to be evaluated by physicians</p>
<p>Future Assessment Plans: (AY 1991-92)</p> <ol style="list-style-type: none"> (1) compare FCC scores on NBRC written Registry Examination to national average for purpose of curricular changes (2) survey of employers and graduates to assess level of mastery of essential concepts and technical skills and ability to exhibit appropriate clinical and critical reasoning skills (3) administer abstract reasoning and numerical ability to assess students' level of skills (4) administer the NBRC Clinical Simulation Examination to measure critical reasoning; and, when appropriate, make curriculum changes. (5) administer an oral clinical exam, developed by faculty, clinical affiliates and Advisory Committee, to assess clinical knowledge and skills (6) administer a technical skills exam to measure technical proficiency (test developed by program faculty, clinical affiliates and Advisory Committee) (7) survey employer of graduates and use findings in conjunction with Inventory for Counseling and Development to evaluate students' key traits and characteristics (8) administer formative and summative evaluation instruments to measure professional and interpersonal skills 				



WELDING TECHNOLOGY

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes																																										
Increase knowledge Increase welding skills	<p>**Competency-based instruction (minimal level 80%)</p> <p>Structural Welding code D 1.1</p>	<p>Oklahoma State University Industrial Park (employers) and Welding Advisory Committee</p>	<p><u>Level One</u> Welding 130 Electric Arc/OxyAcetelene: 39 students. 10 students performed at the 90 to 100% level; 15--80-89% level; 8--70-79% level; 2 failed; 4 dropped.</p> <p><u>Level Two</u> Welding 121, 122, 123, 220: 32 students. 11 students performed at the 90 to 100% level; 11--80-89% level; 7--70-79% level; 3 failed; 0 dropped.</p> <p><u>Level Three</u> Welding 223, 231, 232, 244: 44 students. 21 students performed at the 90 to 100% level; 16--80-89% level; 3--70-79% level; 2 failed; 2 dropped.</p>	None																																										
		<p>American Welding Society</p> <ol style="list-style-type: none"> 1. Shielded Metal Arc Welding Process Plate test: 2. Using Shielded Metal Arc Welding Process Pipe Test: 3. Using Gas Tungsten Arc Welding Process Plate Test (Steel) 4. Using Gas Tungsten Arc Welding Process Plate Test (Aluminum) 5. Using Gas Metal Arc Welding Process 	<table border="0"> <tr> <td>Tested</td> <td>Passed</td> <td>Failed</td> </tr> <tr> <td>28</td> <td>20</td> <td>8</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Tested</td> <td>Passed</td> <td>Failed</td> </tr> <tr> <td>18</td> <td>17</td> <td>1</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Tested</td> <td>Passed</td> <td>Failed</td> </tr> <tr> <td>1</td> <td>1</td> <td>0</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Tested</td> <td>Passed</td> <td>Failed</td> </tr> <tr> <td>1</td> <td>1</td> <td>0</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Tested</td> <td>Passed</td> <td>Failed</td> </tr> <tr> <td>6</td> <td>3</td> <td>3</td> </tr> </table>	Tested	Passed	Failed	28	20	8				Tested	Passed	Failed	18	17	1				Tested	Passed	Failed	1	1	0				Tested	Passed	Failed	1	1	0				Tested	Passed	Failed	6	3	3	<p>More lab time and more preparation time will be used in the gas metal arc welding process since 50% of the students failed these performance tasks</p>
Tested	Passed	Failed																																												
28	20	8																																												
Tested	Passed	Failed																																												
18	17	1																																												
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WELDING TECHNOLOGY				
Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
Skills in metals	Competency-based (minimal level, 80%)	Oklahoma State University Industrial Park (employers) and Welding Advisory Committee	21 students. 8 students performed at the 90 to 100% level; 10--70-79% level; 0 failed; 1 dropped. Course in blueprint reading.	None
Meeting community needs	Industry designed and specified	Industry standards	18 students. 4 students performed at the 90 to 100% level; 7--80-89% level; 3 failed; 2 dropped. Industrial training was provided 51 students. Students performed as follows: 51 students. 18 students performed at the 90 to 100% level; 19--80-89% level; 6--70-79% level; 0 failed; 7 dropped.	None
<p>Future Assessment Plans: (1) assess math and blueprint reading and critical thinking skills through portfolios (2) assess ethics, critical thinking and basic communications through case studies and student portfolios--evaluated by Advisory Committee members (AY 1991-92) (3) student and employer surveys used to assess satisfaction with students' knowledge and skills</p>				

RETENTION AND COMPLETION

Retention was addressed using the following assessments: (See Appendices for full reports.)

Reasons Students Drop Classes

(See chart on page ii.)

31.3% of students give no reason for dropping

59.7% drop because they exceed the 20% absences policy

Steps will be taken to ensure that each drop form is fully completed. Records office will work with staff and students on this matter.

Reasons Students Withdraw From Pueblo Community College

(See chart on page i.)

77% of students withdraw from PCC because of conflicts with work, lack of funds, or illness.

Student Services staff will improve the exit interview process to try to retain any students that may be helped.

Non-Returning Student Survey

Questionnaires were sent to 424 students who were enrolled either Spring Term 1990 or Fall Term 1991 and who did not return to PCC the subsequent term. All students had previously declared an educational goal to obtain a certificate or degree. The survey instrument was developed for use by Community Colleges throughout the State. It was to be used for state accountability purposes. The instrument was accompanied by a letter from the Vice President for Student Services and a return, stamped envelope was included.

Only nineteen surveys were returned, and the results are summarized below:

Seventy-seven point eight percent of the former students are employed. The remaining 16.9% are unemployed by choice. Only 5.3% are unemployed but seeking employment.

Only 7% were dissatisfied with their education. An additional 21% said that they did not continue college because

courses were not available to meet their special needs. A follow-up survey will be mailed to determine the needs that were not being met. Also, additional information will be obtained during counseling and advising sessions to help identify needs and to provide better scheduling. The evening and weekend director will work closely with faculty to ensure that the class needs of the students are met.

All respondents state that their overall evaluation of instruction was good or very good.

The results of the overall evaluation of services showed that a rating of good or very good was indicated by 64.4%. Thirty-five percent rated services a fair. No ratings of poor nor very poor appeared.

Summary of Survey of Withdrawals

A survey was taken of students withdrawing from PCC during Summer Session and Fall Term 1990 (see chart on page i). The major reasons for withdrawal included:

Conflicts with work

59 students or 38% of total respondents

Lack of funds

37 students or 24% of total respondents

Illness

25 students or 15% of total respondents

Transfer to another college

13 students or 8% of total respondents

Other

15 students or 15% of total withdrawals

The College will survey student needs and suggest scheduling changes based on needs to address the withdrawals due to conflicts with work. The PCC Foundation is conducting a \$1 million fund-raising campaign and one emphasis of this campaign is the development of scholarship funds. The college is experiencing a trend of having a greater number of part-time students who meet basic skills and transfer to USC and other 4-year institutions. This is believed to be a positive trend that should continue. Physical fitness facilities will be available to our students when the renovation of the College Center is complete. The College will investigate the feasibility of a wellness program to help reduce withdrawals due to illness.

Summer College Readiness Program

This four-week pilot program took place during August 1991 and involved thirty-five high-risk entering freshmen in the targeted student populations who planned to enter into full-time study at PCC in the Fall.

The Program transpired in conjunction with staff of the Arts/Business/Communications Division, the Alternative Learning Center and the Student Services areas. The purpose of the Program was to provide intensive academic preparation and orientation to the campus, the academic culture and environment, and to enhance the especially high-risk students' chances of survival for the upcoming academic year.

The academic side of the College Readiness Program involved provision of basic skills courses (English, Math, Reading, and Study Skills) monitored and taught by academic faculty at PCC.

Success Rate 85%

During AY 1991-92, the College will track the success rate of students who take this course and compare the rate to students who do not take the course.

Learning Center

The PCC Learning Center is one method the College uses to increase retention of students.

The Center's main emphasis is as a walk-in study and academic assistance area. The Center provides: 1) remediation for students deficient in the background and knowledge relative to course work; 2) supplemental and reinforcement materials as per student interest/need and/or faculty assignments; 3) supplemental study in the area of makeup work, tutoring, and makeup testing; computer-aided instruction for students needing alternate modes of instruction; 4) group study areas; and 5) viewing areas for supplemental videos to course work and/or videos of lectures from certain courses.

It is difficult to assess the effectiveness of the Center on retention. The students are not formally referred; however, the number of students (2,577 in AY 1990-91) indicates that the Center is addressing a need of the students.

Program Completion Rates

In comparing program (AA, AS, AGS, AAS, and certificates) completion rates of students native to PCC and those transferring to PCC between 1988-1990, the

following was learned: The number of students receiving degrees and certificates have declined between these years. This is due to an increase in part-time students and those transferring to four-year institutions. While there has been an insignificant change in the number of minorities receiving degrees, there is a decrease in the number of minorities receiving certificates. (See chart on page vi-viii.)

Initial Degree/Certificate Indication vs Those Actually Earned

Data shown on the charts on pages ix-xi, compare PCC students' initial objectives to earn a degree or certificate with the actual degrees or certificates earned. More students who initially indicated that they wanted to earn an AAS degree or certificate actually earned a degree or certificate in contrast to students who begin in AA, AS or AGS degrees. This is attributed to two factors: Students in the AAS and certificate programs of study were preparing for job-related skills for immediate employment; students who were "undeclared" or those seeking degrees in the Health Professions usually selected the AGS, AA, or AS degree initially while they are completing prerequisites, and then transferred to an AAS degree program.

Tracking Student Success Between College-Preparatory and College-Level Courses

The charts on pages xii-xiv of the appendix track the success of students in college-level courses after they have successfully completed college-preparatory courses. A detailed discussion of this can be found in Question #6 Minority Student Data. The major trends are:

English

College-Preparatory Classes

Students' levels of success have increased over the past three years.

College-level Classes

Students' levels of success have dropped very slightly because of a change in the curriculum.

Mathematics

College-Preparatory Classes

Students' levels of success have decreased slightly over the past three years.

College-Level Classes

A dramatic increase in the levels of success for minority students has been recorded. During AY 1991-92, the College will compare course drop rates of minorities and non-minorities to

determine if drop rates have skewed the results of this measurement.

ALUMNI/STUDENT SATISFACTION

Currently Enrolled Student Survey

Questionnaires were distributed to 600 students in selected classes during Spring Semester 1991. The survey instrument was intended for use for state accountability purposes and was developed by Community Colleges throughout the State. Instructors distributed the survey instrument to a random sample of their classes. CCCOES staff scored the results.

A summary of the results are as follows:

- Of the students currently attending College, 57% are employed. Thirty-one percent do not want employment.
- Ninety-six percent of the respondents rated the instruction received as good or very good.
- Eighty-nine percent of the respondents stated that services received through Student Services were good or very good.



AFTER-GRADUATION PERFORMANCE

A transfer rate analysis performed by CICHE following the work of A. M. Cohen showed the following transfer data for PCC:

Pass Rate for Registry/Certification Exams--Health Professions Programs

All Health Professions programs with registry and certification exams had 86% or better pass rates with the exception of Respiratory Care. (A complete chart of pass rates appears in the Appendix on page xvii.)

The Respiratory Care Program will be under review during AY 1991-92. The College will closely monitor this Program's certification exam pass rates, cost effectiveness and enrollments, and look for ways to improve student outcomes including implementing several new assessment measures stated in the Revised Accountability Plan 1991.

Post-Secondary Placement Follow-up 1989-1990

Placement follow-up information is based on a full population of graduates of vocational programs sample as determined by the CCCOES. Employment percentages

in this report are for students who have completed vocational programs in May 1990 and were employed at the time of survey.

Accounting	100%
*Auto Body Repair	-
Automotive Mechanics	100%
Business Management	90%
Business And Office Technologies	94%
Criminal Justice	97%
Computer Information Systems	90%
Dental Hygiene	89%
Drafting	90%
Electronics Technology	91%
Farm/Ranch Management	90%
Food Service	100%
Machining Technology	86%
*Psychiatric Technician	-
Nursing, ADN	100%
Occupational Therapy Assistant	92%
Nursing, PN	100%
Radiologic Technology	91%
Respiratory Therapy	100%
Welding	83%
School Average	93.5%

* Programs had no respondents.

In addition to the CCCOES survey, many PCC programs completed telephone surveys of their students. Results of these surveys are included in program matrices. Results may vary from the CCCOES data because of differing sampling techniques.

Departmental telephone surveys of employers and students reveals that between 85 - 100% of the students and employers felt that the instruction prepared students for employment.

CHANGES IN REPORTING PLANS AND METHODS THAT DIFFER FROM ACCOUNTABILITY PLAN

This report has been prepared using the CICHE guidelines sent to the College in July, 1991. The College has submitted a Revised Accountability Plan 1991 for approval, and the assessment measures used for this report are based on the revised plan. In some instances, data were not available because the College did not have a system in place during AY 1990-91 to capture data indicated in the revised plan. In those instances, the College will begin reporting the new assessment beginning AY 1991-92.

EVIDENCE OF FACULTY INVOLVEMENT AND INSTITUTIONAL COMMITMENT

Accountability efforts are an integral part of PCC goals and mission. At the beginning of each academic year all units of

the college must submit to the President goals and objectives which incorporate the PCC Revised Accountability Plan 1991. At midpoint and at the end of the year, faculty, through their supervisors, forward to the President the results of their accomplishments. These are incorporated in the Progress Report and submitted to CCHE. All results are published and distributed to the college community, CCCOES and advisory committees.

Faculty and staff developed the 1988 Accountability Plan. The Plan is an official working document which helps the institution establish measurable goals and objectives. The Plan is reviewed and implemented on a regular basis. Following the CCHE's staff evaluation of the 1989-90 Progress Report, special focus groups studied the questions raised by CCHE staff and addressed those concerns. New assessment instruments and refined objectives, which enhance the Plan's effectiveness, were adopted and submitted to CCHE as the 1991 Revised Plan for approval in October 1991. The Revised Plan was followed when compiling the 1990-91 Progress Report.

DEVELOPMENTAL STUDIES & GED PREPARATION

Section 5.02, Goal III of the Revised Accountability Plan 1991, covers the

objectives the College will accomplish with respect to Developmental Studies and GED Preparation Assessment Results for this goal are in the following matrices.

DEVELOPMENTAL STUDIES AND GED PREPARATION

Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
Review basic skills and acquire basic skills needed for success in certificate and degree programs	**Adult Basic Education Pre-test/Post-test	Test of Adult Basic Education (TABE) Locator and Test #5	<p>711 students enrolled Average gain-3.1 grade levels English as a second language 57 enrolled 71% improved minimum of 1 grade level</p> <p>Grade Levels 0-4 222 students enrolled 77% improved minimum of 1.7 grade levels</p> <p>Grade Levels 5-9 297 enrolled 64% improved minimum of 1.4 grade levels</p>	None
	**Post-test GED Preparation	General Education Inventory (GED Test) Forms A, BB, and GED practice forms AA, BB.	<p>Students taking ATBE test and placing in grades 9-12 enrolled in this course.</p> <p>GED Preparatory Students 153 enrolled 56% passed GED test 8% completed course and waiting to take GED 36% still completing course</p> <p>61% of those passing test enrolled in PCC college credit courses</p>	None
	*Student Survey	Developed by committee from Director of Outreach Studies, instructors and curriculum specialist	87% felt quality of instruction was very good or good	None

DEVELOPMENTAL STUDIES AND GED PREPARATION

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Review basic skills and acquire basic skills needed for success in certificate and degree programs	**Non-Returning Student Survey	Developed by committee from Director of Outreach Studies, instructors and curriculum specialist	44.6% left because session ended or because they passed GED Only .2% felt instruction was not helpful	None
Future Assessment Plans: (1) track GED students who enter PCC college-level courses, both minority and non-minority to determine success level (AY 1991-92)				

OUTREACH, BUSINESS, AND COMMUNITY SERVICES

Outreach Studies, Business, and Community Services Goal IV of the Revised Accountability Plan 1991 exist to support adult lifelong learning needs, the changing needs of area employers, and the mission of "community as campus" (through a diversity of credit and non-credit programs and courses delivered through non-traditional times, locations, and/or delivery methods).

The College assessed student outcomes in these areas and the following matrices contain the results of these assessments.

Data gathered for the inmate program measured only student perceptions. No data was gathered to measure gains in knowledge and skills. Fall Semester 1991, a procedure will be implemented to measure student outcomes.

BUSINESS AND INDUSTRY			
Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes
Support needs of area employers	Requests from Pueblo Economic Authority, Industrial Park and local business and industry	Advisory Committee from business and industry	100% have employed PCC students/graduates 100% satisfied with student performance 100% would hire other PCC students/graduates 100% training met job-entry level requirements 70% identified other courses or training needs 90% customized training met their specifications
Future Assessment Plans: (1) No changes (AY 1991-92)			Program Changes Offer additional courses in supervisory skills training, total quality management, appraiser certification, real estate agent certification, EPA laws, regulations and awareness



CRIMINAL JUSTICE ACADEMY AND DEPARTMENT OF CORRECTIONS TRAINING

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
Train, upgrade and improve personnel performance	*Student Survey	PCC committee composed of deans, Student Services, and Criminal Justice Academy personnel representatives (27.6% response rate)	Seminar courses (courses less than 16 hours in length). Rating Scale of 1-10 (10 is high); Improvement in technical proficiency 8.5 Importance of course to job 8.26. Importance of course to promotion 5.2. 97% would recommend course to others.	None
	**Pre-test/Post-test	Developed by faculty	Courses greater than 16 hours in duration. 91% significantly increased in knowledge and skills.	None
	*Employer Survey	Developed by committee from Student Services, counselors, instructors, deans and curriculum specialist Return rate 24%.	75% rated training as good to very good. 80% felt graduates better prepared to perform job compared to those without training.	None
Future Assessment Plans: (1) No changes (AY 1991-92)				

CRIMINAL JUSTICE ACADEMY AND DEPARTMENT OF CORRECTIONS TRAINING--INMATE PROGRAMS

Goals Assessed	Method of Assessment **Major/**Supportive	Validation Process	Student Outcomes	Program Changes
GED, ABE, career development, ESL	240 student surveys seeking student opinions	PCC committee composed of DOC, Director of Inmate Training, Director of External Programs	Student perception on personal skill development gain from classes was assessed.	Implement a valid assessment measure of gains in knowledge and skills
Future Assessment Plans: (1) competency-based assessment for gains in knowledge and skills (AY 1991-92)				

OUTREACH STUDIES

Goals Assessed	Method of Assessment **Major/Supportive	Validation Process	Student Outcomes	Program Changes
Gain knowledge and skills for occupational, intellectual, cultural, social or personal development	**Pre-test/Post-test	Test of Adult Basic Education	Basic Skills Adult Literacy Program--352 Students enrolled in 3 Centers 58 Students (of 352) later enrolled in College credit courses Grade Level Gains <u>Corwin Center</u> 50% improved by minimum of 1.6 levels <u>County Center</u> 75% improved by minimum of 1.4 levels <u>Bradford Center</u> 80% improved by minimum of 1.5 levels or more	None
	*Non-Returning Student Survey	Developed by a committee from Outreach Studies, instructors and curriculum specialist	Primary reasons for leaving involved family, transportation, and lack of interest.	None
	*Student Survey	Developed by a committee from Outreach Studies, instructors and curriculum specialist	Quality of Instruction: 45% very good, 41% good Course Objectives Clear: 73% very good/good Content of Course: 77% very good/good	None
Support Life-Long Learning	*Consumer Home Management Student Survey	Developed by a committee from Outreach Studies, instructors and curriculum specialist	96% satisfied with course in home making, life skills management, and independent living.	None

Future Assessment Plans: (1) No changes
(AY 1991-92)

STUDENT SUPPORT SERVICES

To facilitate student progress and success in community college programs.

Objective 1: Demonstrate increased knowledge of self

I. Monitoring the Usage of the Services Provided.

The expectation is that the use of the services will increase each year, thereby providing more students an increased knowledge of themselves. During the 1990-91 school year, students used the following services:

	<u>1989-90</u>	<u>1990-91</u>
Counseling Center	N/A	351
Assessment Center	4,100	6,404
Supplemental Services	902	1,119
Various student activities	<u>100</u>	<u>120</u>
Totals	<u>5,102</u>	<u>7,994</u>

The system utilized for the Counseling, Assessment, Supplemental Services, and various student activities consisted of different types of tracking. Day-to-day records were utilized in most instances. A newly acquired computerized enrollment management system, the "Noel Levitz"

system, will be in place in the Fall Semester of 1991. Data gathered will be used for counseling and advising students.

The Counseling Center utilized a "card" system with identification and a follow-up method for each student. The Assessment Center utilized a Scantron method with recommendations for each student assessed. The Supplemental Services office provided each student an application form with a bi-monthly follow-up system. Student activities were kept on a "log" system that allowed for an evaluation and survey system. Each recordkeeping system will be compiled and compared to the previous year to demonstrate an increased knowledge of self.

II. Providing Orientation Programs for New Students.

"New student" orientation classes were initiated and developed by the Early Intervention Team which is composed of staff members from Student Services, Instruction and Administrative Services of PCC.

The "new student" orientation classes include instruction on the services and programs available to the students, and they are designed to increase the student's

awareness of diverse cultural and ethnic groups, ethics, and moral values.

Eighty-one students took the pre- and post-tests. Students needed to show a 70% or more level of comprehension to pass each test. Results of the first class are:

<u>Semester</u>	<u>Pre-test</u>	<u>Post-test</u>
Spring 91	15 passed	69 passed

Recommendations: The orientation classes have proven to be highly beneficial. Increase in knowledge is documented by the results of the pre-test and post-test.

III. Helping Students Succeed with their Education and Adjust to the Rigors of School

Special attention was given to the measurement of student's ethics as it relates to a statement in the PCC's catalog--Code of Ethics Violation. Student violations to the Code are tabulated each term. The past results are as follows:

Code of Ethics Violations

<u>Semester</u>	<u>No. of Violations</u>
Fall 90	4
Spring 91	1

Recommendations: The method of evaluation only measures serious violations. It is recommended that violations within instruction be monitored and reported to determine if there are additional violations.

Objective 2: Enter and Succeed in Programs provided by the College.

I. Monitoring the Success Rate of Students Identified as "High Risk."
The results for the 1990-91 school year were as follows:

Students identified as "high risk" 1,337
Students completing spring term 1,264
Percent retained 94.5%

Summary of GPA of these high risk students:

<u>Summary of GPA</u>	<u># of Students</u>	<u>%</u>
4.0+	92	7%
3.0-3.9	442	35%
2.0-2.9	530	42%
1.0-1.9	139	11%
0- .9	<u>61</u>	5%
Total	<u>1,264</u>	

Recommendations: The College will monitor the number of students who select a program of study after making application for admissions.

Service Provided by Student Services' Counseling Center AY 1990-91

One hundred and eighty-three students registered as undeclared and made contact with the counseling center.

One hundred and twenty-four students identified a major after utilizing the services of the Counseling Center.

Recommendations: Students who utilize the Career Counseling Center are experiencing success; therefore, more undeclared students will be encouraged to utilize these services. Undeclared students carrying six credits or more will be identified and a letter will be sent requesting that they come in for career counseling. Greater emphasis will also be placed on encouraging students to select a major during the mandatory orientation program.

II. Minority and Non-Minority Student Performance on Basic Skills Assessment

The percent of students passing the four areas of the Basic Skills Assessment tests are as follows:

<u>Area</u>	<u>Non-Minority</u>	<u>Minority</u>
Reading	92%	82%
Math	36%	28%
English	56%	45%
Computer Literacy	85%	64%

The structure of the Math component of the test changed from five units in 1989-90 to ten units in 1990-91; therefore, the statistics in math are not reliable and will be addressed in the 1991-92 report. See chart on page xv.

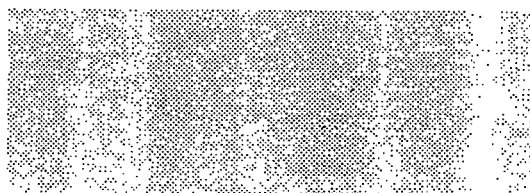
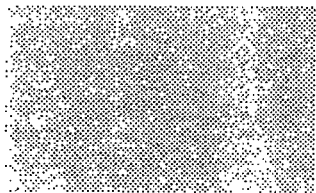
ACQUISITION OF ADDITIONAL DETAILS

For additional details about this report or the PCC accountability efforts in general, contact the following individuals:

- Dr. Monique Amerman, Vice President for Instruction
- Dr. Charles Stamps, Dean of Arts, Business, and Communications Division
- Warren Curtis, Vice President for Student Services

The matrices used in this report were condensed from detailed program reports submitted by faculty. Contact Dr. Charles Stamps to review these comprehensive reports.

APPENDICES



11C

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**REASONS FOR WITHDRAWING FROM SCHOOL
SUMMER AND FALL TERMS 1990**

All students that withdraw during a term are required to complete a "Withdrawal Form" through the Records Office. The complete form identifies the reason for leaving school. A summary of these reasons are:

Reason	Percent of Responses
Conflict with work	38
Lack of funds	24
Illness	15
Transfer to another school	8
Class canceled	3
Prerequisite to course not met	3
Too stressful	2
Transportation problems	1
Other reasons	1
No reason given	5

Recommendations: Although stated reasons may be valid, staff may be able to resolve a portion of them without resulting in termination of the students education. Student Services staff and instructors will improve the exit interview process.

**REASONS FOR DROPPING CLASS
SUMMER AND FALL TERMS 1990**

Students are required to complete a "Class Drop" form after the end of the designated drop date of the term. Reasons for the tabulation of these reasons follow:

Reason	Number	Percent
No reason given	220	31.3
Illness	10	1.4
Too stressful	1	.1
Conflict with work	23	3.2
Difficulty with academics	1	.1
Prerequisite to course not met	2	.2
Relocated	14	2.0
Exceeded 20 percent absences	418	59.7
Other reasons	194	27.7

Recommendations: To provide better data, steps must be taken to assure the completion of the total Class Drop form to include reasons for the drop. The Records Office will encourage students and staff to give reasons for dropping classes when completing the form.

DEGREES AND CERTIFICATES GRANTED AWARD TYPE					
	DEGREE		CERTIFICATE		
	COUNT	PERCENT	COUNT	PERCENT	
1988-89					
GRADUATES:					
Minority	63	28%	36	30%	
Non-minority	161	72%	84	70%	
TOTAL	224	100%	120	100%	
1989-90					
Minority	58	29%	35	34%	
Non-minority	142	71%	68	66%	
TOTAL	200	100%	103	100%	
1990-91					
Minority	67	27%	24	34%	
Non-minority	181	73%	47	66%	
TOTAL	248	100%	71	100%	

Source: SURDS Degrees Granted File

MSD #1

TOTAL UNDUPLICATED STUDENT HEAD COUNT MINORITY vs. NON-MINORITY		
	COUNT	PERCENT
1988-89		
Minority	1306	32%
Non-minority	2718	68%
TOTAL	4024	100%
1989-90		
Minority	1487	32%
Non-minority	3116	68%
TOTAL	4603	100%
1990-91		
Minority	1441	32%
Non-minority	3034	68%
TOTAL	4475	100%

Source: Series Z Student Information System

MSD #2

**UNDULICATED STUDENT HEAD COUNT
STUDENT EDUCATIONAL PLAN
MINORITY vs. NON-MINORITY**

	CERTIFICATE		DEGREE		JOB UPGRADE		PERSONAL INTEREST		TRANSFER OUT (for some reason)		UNDECIDED	
	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
1988-89												
MINORITY	289	31%	642	35%	92	31%	27	23%	25	30%	231	30%
NON-MINORITY	633	69%	1179	65%	208	69%	92	77%	58	70%	548	70%
TOTAL	922	100%	1821	100%	300	100%	119	100%	83	100%	779	100%
1989-90												
MINORITY	215	31%	878	36%	0	0%	1	100%	3	43%	390	27%
NON-MINORITY	488	69%	1565	64%	2	100%	0	0	4	57%	1057	73%
TOTAL	703	100%	2443	100%	2	100%	1	100%	7	100%	1447	100%
1990-91												
MINORITY	168	30%	1024	36%	0	0%	0	0%	0	0%	249	23%
NON-MINORITY	386	70%	1827	64%	0	0%	0	0%	0	0%	821	77%
TOTAL	554	100%	2851	100%	0	0%	0	0%	0	0%	1070	100%

Source: Series Z Student Information System

ETHNIC BREAKDOWN RATES OF STUDENT NATIVE TO P.C.C. AND THOSE TRANSFERRING TO P.C.C.

AY 1990-91		NATIVE TO P.C.C.		TRANSFERRED TO P.C.C.		TOTAL	
DEGREE AWARDED	ETHNICITY	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
AA DEGREE	MINORITY	1	25%	0	0%	1	20%
	NON-MINORITY	3	75%	1	100%	4	80%
AA DEGREE TOTALS:		4	100%	1	100%	5	100%
AAS DEGREE	MINORITY	60	29%	3	12%	63	27%
	NON-MINORITY	147	71%	22	88%	170	73%
AAS DEGREE TOTALS:		207	100%	25	100%	233	100%
AGS DEGREE	MINORITY	3	38%	0	0%	3	33%
	NON-MINORITY	5	62%	1	100%	6	67%
AGS DEGREE TOTALS:		8	100%	1	100%	9	100%
AS DEGREE	MINORITY	0	0%	0	0%	0	0%
	NON-MINORITY	1	100%	0	0%	1	100%
AS DEGREE TOTALS:		1	100%	0	0%	1	100%
CERTIFICATE	MINORITY	23	35%	1	20%	24	34%
	NON-MINORITY	43	65%	4	80%	47	66%
CERTIFICATE TOTALS:		66	100%	5	100%	71	100%

Source: SURDS Degrees Granted File cross referenced to the SURDS Enrollment File.

ETHNIC BREAKDOWN RATES OF STUDENT NATIVE TO P.C.C. AND THOSE TRANSFERRING TO P.C.C.

DEGREE AWARDED	ETHNICITY	NATIVE TO P.C.C.		TRANSFERRED TO P.C.C.		TOTAL	
		COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
AA DEGREE	MINORITY	0	0%	0	0%	0	0%
	NON-MINORITY	0	0%	1	100%	1	100%
AA DEGREE TOTALS:		0	0%	1	100%	1	100%
AAS DEGREE	MINORITY	53	29%	2	17%	55	29%
	NON-MINORITY	127	71%	10	83%	137	71%
AAS DEGREE TOTALS:		180	100%	12	100%	192	100%
AGS DEGREE	MINORITY	3	43%	0	0%	3	43%
	NON-MINORITY	4	57%	0	0%	4	57%
AGS DEGREE TOTALS:		7	100%	0	0%	7	100%
AS DEGREE	MINORITY	0	0%	0	0%	0	0%
	NON-MINORITY	0	0%	0	0%	0	0%
AS DEGREE TOTALS:		0	0%	0	0%	0	0%
CERTIFICATE	MINORITY	34	37%	1	9%	35	34%
	NON-MINORITY	58	63%	10	91%	68	66%
CERTIFICATE TOTALS:		92	100%	11	100%	103	100%

Source: SURDS Degrees Granted File cross referenced to the SURDS Enrollment File.

ETHNIC BREAKDOWN RATES OF STUDENT NATIVE TO P.C.C. AND THOSE TRANSFERRING TO P.C.C.

DEGREE AWARDED	ETHNICITY	NATIVE TO P.C.C.		TRANSFERRED TO P.C.C.		TOTAL	
		COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
AA DEGREE	MINORITY	0	0%	0	0%	0	0%
	NON-MINORITY	0	0%	0	0%	0	0%
AA DEGREE TOTALS:		0	0%	0	0%	0	0%
AAS DEGREE	MINORITY	61	29%	2	20%	63	28%
	NON-MINORITY	152	71%	8	80%	160	72%
AAS DEGREE TOTALS:		213	100%	10	100%	223	100%
AGS DEGREE	MINORITY	0	0%	0	0%	0	0%
	NON-MINORITY	1	100%	0	0%	1	100%
AGS DEGREE TOTALS:		1	100%	0	0%	1	100%
AS DEGREE	MINORITY	0	0%	0	0%	0	0%
	NON-MINORITY	0	0%	0	0%	0	0%
AS DEGREE TOTALS:		0	0%	0	0%	0	0%
CERTIFICATE	MINORITY	34	31%	2	22%	36	30%
	NON-MINORITY	77	69%	7	78%	84	70%
CERTIFICATE TOTALS:		111	100%	9	100%	120	100%

Source: SURDS Degrees Granted File cross referenced to the SURDS Enrollment File.

**INITIAL DEGREE AND CERTIFICATE OBJECTIVES FOR THE ACADEMIC YEAR
VERSES THE ACTUAL DEGREES AWARDED**

AY 1990-91		INITIAL DEGREE OBJECTIVE		ACTUAL DEGREE AWARDED	
DEGREE TYPE	ETHNICITY	COUNT	PERCENT	COUNT	PERCENT
AA DEGREE	MINORITY	56	30%	1	20%
	NON-MINORITY	130	70%	4	80%
AA DEGREE TOTALS:					
AAS DEGREE	MINORITY	666	36%	63	27%
	NON-MINORITY	1189	64%	170	73%
AAS DEGREE TOTALS:					
AGS DEGREE	MINORITY	147	47%	3	33%
	NON-MINORITY	227	53%	6	67%
AGS DEGREE TOTALS:					
AS DEGREE	MINORITY	180	48%	0	0%
	NON-MINORITY	339	52%	1	100%
AS DEGREE TOTALS:					
CERTIFICATES	MINORITY	168	30%	24	34%
	NON-MINORITY	386	70%	47	66%
CERTIFICATE TOTALS:					
		554	100%	71	100%

Source: SURDS Degrees Granted File SURDS Enrollment File

**INITIAL DEGREE AND CERTIFICATE OBJECTIVES FOR THE ACADEMIC YEAR
VERSES THE ACTUAL DEGREES AWARDED**

AY 1989-90

DEGREE TYPE	ETHNICITY	INITIAL DEGREE OBJECTIVE		ACTUAL DEGREE AWARDED	
		COUNT	PERCENT	COUNT	PERCENT
AA DEGREE	MINORITY	43	32%	0	0%
	NON-MINORITY	91	68%	1	100%
AA DEGREE TOTALS:		134	100%	1	100%
AAS DEGREE	MINORITY	596	35%	55	29%
	NON-MINORITY	1093	65%	137	71%
AAS DEGREE TOTALS:		1689	100%	192	100%
AGS DEGREE	MINORITY	102	34%	3	43%
	NON-MINORITY	197	66%	4	57%
AGS DEGREE TOTALS:		299	100%	7	100%
AS DEGREE	MINORITY	151	39%	0	0%
	NON-MINORITY	237	61%	0	0%
AS DEGREE TOTALS:		388	100%	0	0%
CERTIFICATES	MINORITY	215	31%	35	34%
	NON-MINORITY	488	69%	68	66%
CERTIFICATE TOTALS:		703	100%	103	100%

Source: SURDS Degrees Granted File SURDS Enrollment File

**INITIAL DEGREE AND CERTIFICATE OBJECTIVES FOR THE ACADEMIC YEAR
VERSES THE ACTUAL DEGREES AWARDED**

AY 1988-89

DEGREE TYPE	ETHNICITY	INITIAL DEGREE OBJECTIVE		ACTUAL DEGREE AWARDED	
		COUNT	PERCENT	COUNT	PERCENT
AA DEGREE	MINORITY	9	16%	0	0%
	NON-MINORITY	49	84%	0	0%
AA DEGREE TOTALS:		58	100%	0	0%
AAS DEGREE	MINORITY	544	35%	63	28%
	NON-MINORITY	1032	65%	160	72%
AAS DEGREE TOTALS:		1576	100%	223	100%
AGS DEGREE	MINORITY	83	41%	0	0%
	NON-MINORITY	118	59%	1	100%
AGS DEGREE TOTALS:		201	100%	1	100%
AS DEGREE	MINORITY	26	48%	0	0%
	NON-MINORITY	28	52%	0	0%
AS DEGREE TOTALS:		54	100%	0	0%
CERTIFICATES	MINORITY	289	31%	36	30%
	NON-MINORITY	633	69%	84	70%
CERTIFICATE TOTALS:		922	100%	120	100%

Source: SURDS Degrees Granted File SURDS Enrollment File

**TRACKING STUDENT PERFORMANCE IN COLLEGE PREPARATORY COURSES
AND THEIR
PERFORMANCE IN COLLEGE LEVEL COURSES AFTER SATISFACTORILY* COMPLETING PREPARATORY COURSES**

LEVEL/ SUBJECT AREA	ETHNICITY	TOTALS			SATISFACTORY COMPLETION		UNSATISFACTORY COMPLETION	
		ENROLLMNT COUNT	PCT ENROLLD	ENROLLMNT COUNT	SUCCESS RATE	ENROLLMNT COUNT	FAIL RATE	
COLLEGE PREP. ENGLISH	MINORITY	573	44%	428	75%	145	25	
	NON-MINORITY	743	56%	601	81%	142	19	
COLLEGE PREP. ENGLISH TOTALS:		1316	100%	1029	78%	287	22	
CORE LEVEL ENGLISH	MINORITY	286	38%	229	80%	57	20	
	NON-MINORITY	470	62%	396	84%	74	16	
CORE LEVEL ENGLISH TOTALS:		756	100%	625	83%	131	17	
COLLEGE PREP. MATH	MINORITY	1249	44%	934	75%	315	25	
	NON-MINORITY	1564	56%	1230	79%	334	21	
COLLEGE PREP. MATH TOTALS:		2813	100%	2164	77%	649	23	
CORE LEVEL MATH	MINORITY	57	35%	51	89%	6	11	
	NON-MINORITY	105	65%	78	74%	27	26	
CORE LEVEL MATH TOTALS:		162	100%	129	80%	33	20	

*Students are graded on a Satisfactory/Unsatisfactory basis in College Preparatory courses

Source: Series Z: Student Information System Extract w/ comparisons made through a COBOL program.

**TRACKING STUDENT PERFORMANCE IN COLLEGE PREPARATORY COURSES
AND THEIR
PERFORMANCE IN COLLEGE LEVEL COURSES AFTER SATISFACTORILY* COMPLETING PREPARATORY COURSES**

LEVEL/ SUBJECT AREA	ETHNICITY	TOTALS		SATISFACTORY COMPLETION		UNSATISFACTORY COMPLETION		
		ENROLLMNT COUNT	ENROLLD PCT	ENROLLMNT COUNT	SUCCESS RATE	ENROLLMNT COUNT	FAIL RATE	
AY 1989-90								
COLLEGE PREP. ENGLISH	MINORITY	604	45%	411	68%	193	32%	
	NON-MINORITY	745	55%	577	77%	168	23%	
COLLEGE PREP. ENGLISH TOTALS:		1349	100%	988	73%	361	27%	
CORE LEVEL ENGLISH	MINORITY	263	36%	217	83%	46	17%	
	NON-MINORITY	460	64%	414	90%	46	10%	
CORE LEVEL ENGLISH TOTALS:		723	100%	631	87%	92	13%	
COLLEGE PREP. MATH	MINORITY	784	41%	593	76%	191	24%	
	NON-MINORITY	1130	59%	892	79%	238	21%	
COLLEGE PREP. MATH TOTALS:		1914	100%	1485	78%	429	22%	
CORE LFVEL MATH	MINORITY	43	34%	30	70%	13	30%	
	NON-MINORITY	83	66%	61	73%	22	27%	
CORE LEVEL MATH TOTALS:		126	100%	91	72%	35	28%	

*Students are graded on a Satisfactory/Unsatisfactory basis in College Preparatory courses
Source: Series Z: Student Information System Extract w/ comparisons made through a COBOL program.

Future Assessment Plans: The College will compare minority and non-minority scores on the Basic Skills Assessment Examinations to determine trends.
(AY 1991-92)

**TRACKING STUDENT PERFORMANCE IN COLLEGE PREPARATORY COURSES
AND THEIR
PERFORMANCE IN COLLEGE LEVEL COURSES AFTER SATISFACTORILY* COMPLETING PREPARATORY COURSES**

AY 1988-89

LEVEL/ SUBJECT AREA	ETHNICITY	TOTALS			SATISFACTORY COMPLETION			UNSATISFACTORY COMPLETION		
		ENROLLMNT COUNT	ENROLLD PCT	ENROLLMNT COUNT	SUCCESS RATE	ENROLLMNT COUNT	ENROLLMNT COUNT	FAIL RATE		
COLLEGE PREP. ENGLISH	MINORITY	363	47%	234	64%	129	36%			
	NON-MINORITY	404	53%	262	65%	142	35%			
COLLEGE PREP. ENGLISH TOTALS:		767	100%	496	65%	271	35%			
CORE LEVEL ENGLISH	MINORITY	417	38%	338	81%	79	19%			
	NON-MINORITY	686	62%	601	88%	85	12%			
CORE LEVEL ENGLISH TOTALS:		1103	100%	939	85%	164	15%			
COLLEGE PREP. MATH	MINORITY	724	43%	556	77%	168	23%			
	NON-MINORITY	969	57%	783	81%	186	19%			
COLLEGE PREP. MATH TOTALS:		1693	100%	1339	79%	354	21%			
CORE LEVEL MATH	MINORITY	50	37%	29	58%	21	42%			
	NON-MINORITY	86	63%	62	72%	24	28%			
CORE LEVEL MATH TOTALS:		136	100%	91	67%	45	33%			

*Students are graded on a Satisfactory/Unsatisfactory basis in College Preparatory courses

Source: Series Z: Student Information System Extract w/ comparisons made through a COBOL program.

**Basic Skills Ethnicity Statistics
1990 - 1991**

Ethnicity	Reading			Math			English			Computer		
	Took	Pass	%	Took	Pass	%	Took	Pass	%	Took	Pass	%
White	971	890	92%	1,318	476	36%	1,264	711	56%	774	660	85%
Black	38	30	79%	46	12	26%	47	22	47%	14	12	86%
Oriental	22	14	64%	20	7	35%	20	9	45%	7	2	29%
Hispanic	628	525	84%	807	228	28%	740	332	45%	354	237	67%
Indian/ Nat Amer.	27	18	67%	39	10	26%	31	12	39%	17	13	76%
Unknown	174	148	85%	180	15	8%	174	63	36%	30	4	13%
Totals	1,860	1,625	87%	2,410	748	31%	2,276	1,149	50%	1,196	928	78%

STUDENT REASONS FOR WITHDRAWAL MINORITY VERSES NON-MINORITY							
AY 1990-91	TOTALS			MINORITY		NON-MINORITY	
	WITHDRAWAL REASONS	ENROLLMENT COUNT	WITHDRAWAL RATE	ENROLLMENT COUNT	PCT	ENROLLMENT COUNT	PCT
ACADEMIC PROBLEMS	6	1%	2	33%	4	67%	
ADMINISTRATIVE DROP	15	3%	1	7%	14	93%	
FINANCIAL PROBLEMS	61	13%	17	28%	44	72%	
HEALTH/FAMILY PROBLEMS	51	11%	18	35%	33	65%	
PERSONAL REASONS	131	29%	47	36%	84	64%	
OTHER PROBLEMS	190	43%	56	29%	134	71%	
WITHDRAWAL TOTALS:	454	100%	141	31%	313	69%	
DID NOT WITHDRAW	9310	100%	3157	34%	6153	66%	

Source: Series Z: Student Information System Z-Writer

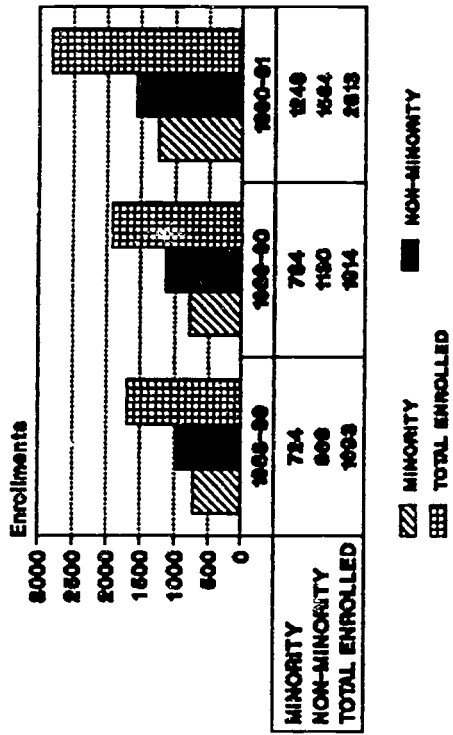
PASS RATES FOR REGISTRY/CERTIFICATION EXAMS
HEALTH PROFESSIONS PROGRAMS

PROGRAM	EXAM	PASS RATES
Dental Hygiene	1991 Written Exam 1991 Clinical Exam	11 of 12 = 92% 11 of 11 = 100%
Nursing, LPN	1990 NCLEX Exam (1991 not available)	51 of 51 = 100%
Nursing, ADN	1990 NCLEX Exam (1991 not available)	47 of 49 = 96%
Occupational Therapy Assistant	1990 Written Exam 1991 National Certification Exam	10 of 11 = 90% 5 of 5 = 100%
Physical Therapist Assistant Program	First graduating class took exam July 1991 results not available	
Psychiatric Technician	Colorado State Board Nursing Licensing Exam in Psychiatric Technician MI June 1991	11 of 11 = 100%
Respiratory Care	NBRC entry-level NBRC Written Registry	6 of 6 = 100% 0 of 2 = 0%
Radiologic Technology	March 1991 ARRT Exam	14 of 16 = 86%
Surgical Technology	LCC-ST -- September 1990	12 of 13 passed the LCCST exam. 6 out of 7 who began the program in Fall 1990 completed the Surgical Technology program.

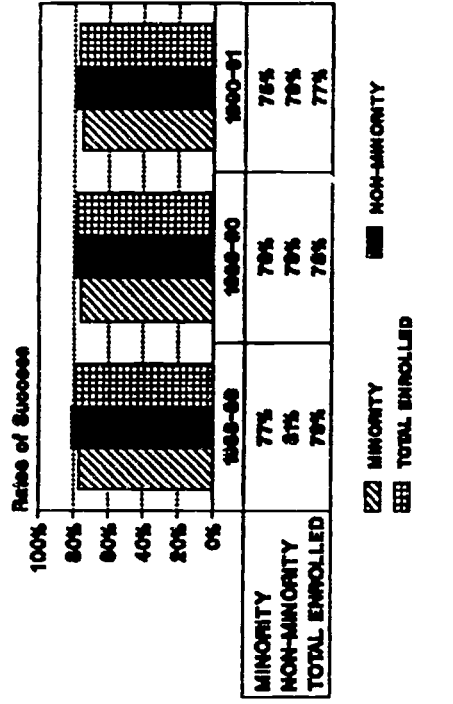
ARRT -- American Registry of Radiologic Technology
 CRTT -- Certified Respiratory Therapy Technician
 RRT -- Registered Respiratory Therapist
 NCLEX -- National Council Licensure Examination
 LCC-ST -- Liaison Certification Council for Surgical Technology
 NBRC -- National Board for Respiratory Care

TRACKING STUDENT SUCCESS IN MATH

Student Enrollments in College Prep. Math

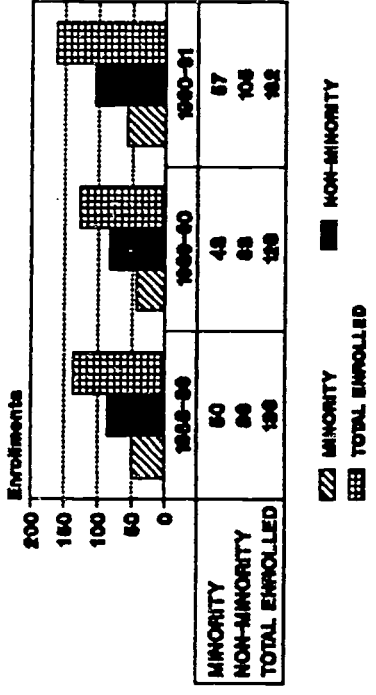


Success Rates for College Prep Performance in Math



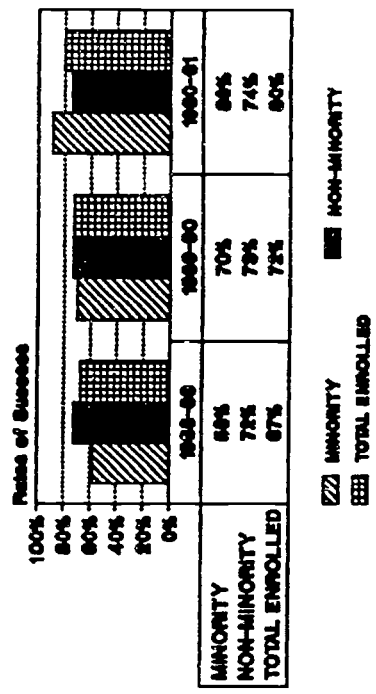
Students Are Graded on a Satisfactory/Unsatisfactory Basis.

Student Enrollment in College-Level Math after Satisfactorily Completing College Prep. Courses



Students Are Graded on a Satisfactory/Unsatisfactory Basis.

Student Success Rates in College-Level Math after Satisfactorily Completing College Prep. Courses

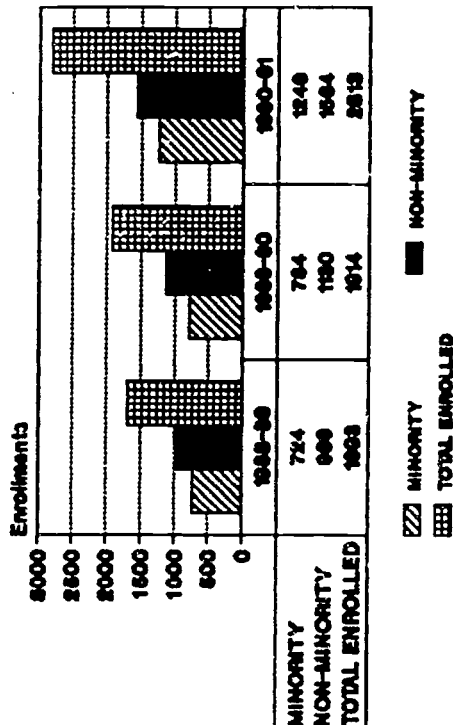


Students Are Graded on a Satisfactory/Unsatisfactory Basis.

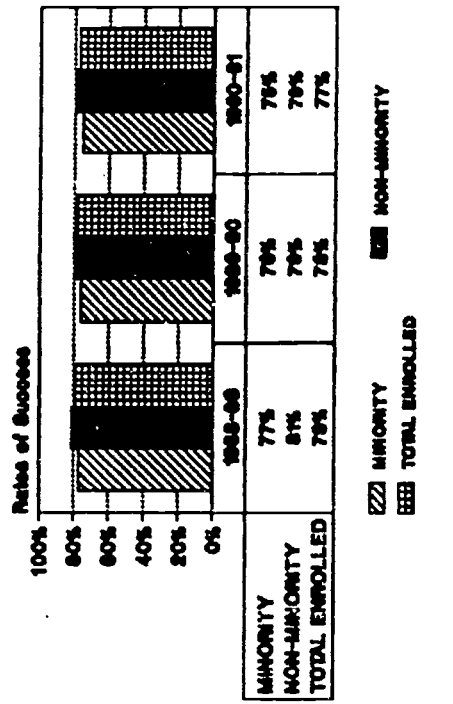


TRACKING STUDENT SUCCESS IN MATH

Student Enrollments in College Prep. Math

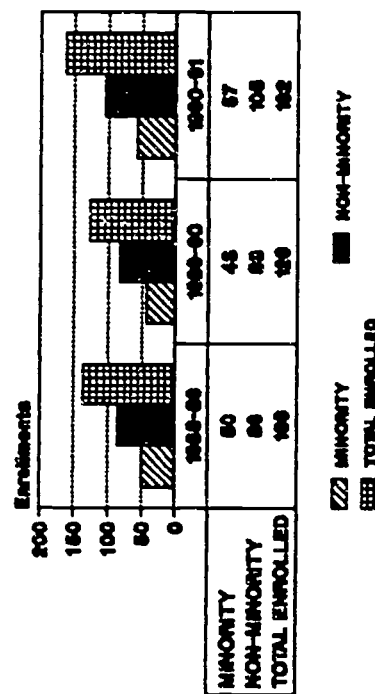


Success Rates for College Prep Performance in Math



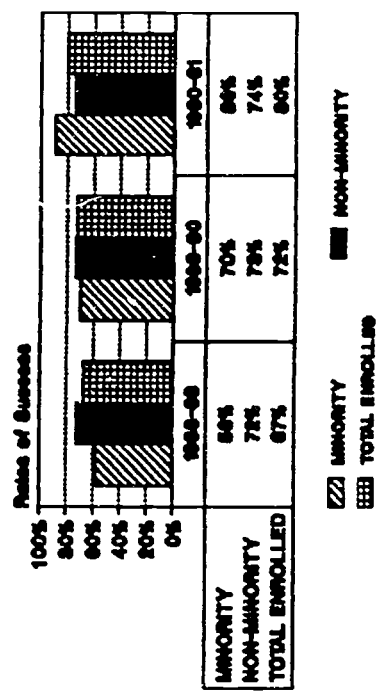
Students Are Graded on a Satisfactory/Unsatisfactory Basis.

Student Enrollment in College-Level Math after Satisfactorily Completing College Prep. Courses



Students Are Graded on a Satisfactory/Unsatisfactory Basis.

Student Success Rates in College-Level Math after Satisfactorily Completing College Prep. Courses



Students Are Graded on a Satisfactory/Unsatisfactory Basis.

