

DOCUMENT RESUME

ED 413 967

JC 980 023

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 TITLE School to College Linkage--New Models That Work.  
 INSTITUTION Pima County Community Coll. District, AZ.  
 PUB DATE 1997-10-00  
 NOTE 45p.; Paper presented at the Annual Meeting of the National Council for Occupational Education (23rd, San Antonio, TX, October 23-25, 1997).  
 PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)  
 EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*Career Academies; Career Exploration; \*College School Cooperation; Community Colleges; Corporate Support; Education Work Relationship; Experiential Learning; \*High School Students; High Schools; Outreach Programs; Program Descriptions; \*Summer Programs; Two Year Colleges; \*Vocational Education  
 IDENTIFIERS \*Pima Community College AZ; School to Work Opportunities Act 1994

ABSTRACT

In an effort to link the K-12 systems with postsecondary education, Pima Community College (PCC) developed a number of outreach programs, one of which was the Summer Career Academy. During the summer of 1997, with the support of the Pima and Santa Cruz Counties School To Work Partnership and local business and industry, PCC conducted a series of 21 Summer Career Academies for high school juniors and seniors. The academies took place on PCC campuses and met for 3 weeks, combining a three-credit PCC course with field trips, guest speakers, and other supporting activities that provided students with career exploration opportunities. Fifteen occupational areas were offered, with the highest enrollment in computer science/Internet, health care, and emergency services. The School To Work grant covered the costs of the program. The academies were very successful, as indicated by the unexpectedly high enrollment of 403 students and a completion rate of 90.8%. Students represented a total of 36 high schools, including a number of alternative schools, and stated that they enjoyed and benefited from the hands-on experience and numerous field trips. Suggestions for improvement included longer academies, better equipment/computers, and more variety, field trips, and hands-on experience. (YKH)

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# Pima Community College

## Presentation

ED 413 967

### “School to College Linkage-- New Models that WORK”

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### NCOE 23rd Annual Conference “Voyage To The Next Generation”

**October 23-25, 1997**  
**San Antonio, Texas**

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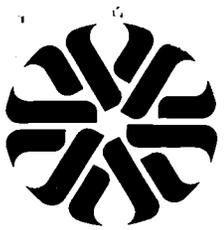
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# ***Pima Community College***

## **“School to College Linkage-- New Models that WORK”**

### Handout List

1. Curriculum Partnership Models
2. Summer Career Academies Executive Summary  
1997 Career Academies Final Evaluation Report
3. On-Site Concurrent Enrollment Flowchart
4. On-Site Concurrent Occupational Courses
5. Copies of Overhead Transparencies

## CURRENT MODELS OF CURRICULUM PARTNERSHIP FOR HIGH SCHOOLS AND PIMA COMMUNITY COLLEGE TUCSON, ARIZONA

### **Model A: Dual Enrollment**

A high school student qualifies for dual enrollment to receive both high school credit and PCC credit if he or she is also enrolled in four or more other high school classes. If a student is enrolled in at least four (4) high school classes, the fifth (5th) class may be a college class. The student pays PCC tuition and must complete a form signed by both a parent, a high school counselor, and a high school administrator. Classes may be located on a PCC campus, at a high school, or at some other location.

### **Model B: Curricular Alignment**

High school instructors who are knowledgeable about specific programs and courses at PCC may "align" and sequence the high school curriculum to fit with the College curriculum. The changes may only be matters of instructional strategy and student assignments. No college credit is earned for high school courses; but when the curriculum is aligned, the transition from the high school to the community college is smooth. Students are well prepared for PCC classes and are not hindered by repeating previous coursework at the college level.

### **Model C: Course Articulation**

A high school student may receive PCC credit for the skills and knowledge acquired in high school courses. The high school course performance objectives must be equal to or exceed the performance objectives of a corresponding college course. The key to success in the course articulation process is open and trusting communication between the faculty members of both institutions. The three-step articulation process includes the following: 1) An Intergovernmental Agreement, 2) Initial Discussions and Approval of College Deans, and 3) Faculty Discussions, Competency Matching, and Internal Approvals. A student earns the "articulated" credit after enrolling at PCC and completing a specified number of credits. There is no charge to the student for articulated credit.

### **Model D: Shared Curriculum**

A high school student participates in a cooperatively planned four-year sequence of study beginning in the 11th grade with the initial objective of an associate degree. The curriculum for the 11th and 12th grades has the dual function of providing students with requirements for high school graduation and preparing them with the fundamentals of the associate degree major. Many associate degree programs may in turn be the basis of a bachelor's degree major.

### **Model E: Concurrent Enrollment**

An administrative partnership between Pima Community College and the high school districts in which qualified juniors and seniors are enrolled in select introductory Pima courses to be taught at the high school during the regular high school day: the courses count for both college and high school credit. "On-Site Concurrent Enrollment" refers to courses that are conducted "on-site" at the high school, and in which the enrollment is closed to others. In this arrangement, instructional costs are paid by the high school and tuition is paid by the College. "On-Campus Concurrent Enrollment" refers to courses taught on a College Campus, and in which students may be in either closed or open enrollment classes. In "On Campus" programs, the high school pays tuition and the College pays instructional costs.

TYPES AND QUALITIES OF HIGH SCHOOL CURRICULUM ARTICULATION

TYPE	PCC CREDIT AWARDED	CREDIT APPLIES TO A PCC DEGREE	H.S. CREDIT AWARDED	HIGH SCHOOL FACULTY ROLE	INTERGOVERNMENTAL AGREEMENT REQUIRED	SPECIAL FACILITATION	FUNDING SOURCE
<b>MODEL A: DUAL ENROLLMENT</b>							
1. H.S. student in open enrollment class	Yes & UA transfer defined	May, but not by design	Yes	Advising students	No	H.S. & Campus administrators	Students pay tuition*
2. Enhanced dual enrollment (Enrollment limited to H.S. students)	Yes & UA transfer defined	May, but not by design	Yes	Marketing and advising students	No	PCC Curriculum Office & Campus Administrators	Students pay tuition*/federal funding for enhancements
3. Career Academies	Yes & UA transfer defined	May, but not by design	Yes	Marketing and advising students	No	Curriculum Office & Campus Administrators	At present, all federal funding
<b>MODEL B: CURRICULAR ALIGNMENT</b>							
1. Course alignment	No	Not applicable	Yes	Faculty adjust content for H.S./PCC transition	No	PCC Curriculum Office	None
2. Program alignment	No	Not applicable	Yes	Faculty adjust content for H.S./PCC transition	No	PCC Curriculum Office	None
<b>MODEL C: COURSE ARTICULATION</b>							
Course Articulation	Yes & UA transfer undefined	May, depending on degree	Yes	H.S. faculty meet with PCC faculty to discuss content**	Yes and Memos of Understanding	PCC Curriculum Office & student***	None
<b>MODEL D: SHARED CURRICULUM</b>							
Shared Curriculum (Tech Prep Model)	Yes & UA transfer defined	Yes, by design	Yes	H.S. faculty meet with PCC faculty to discuss content***	Yes and Memos of Understanding	PCC Curriculum Office, Campuses, & High Schools.	Students pay tuition**
<b>MODEL E: CONCURRENT ENROLLMENT</b>							
1. On-site Concurrent Enrollment	Yes & UA transfer defined	May, depending on degree	Yes	H.S. faculty certified to teach PCC courses and are paid by the H.S.**	Yes and Memos of Understanding	PCC Curriculum Office, Campuses, & H.S. Coordinator	College pays tuition; H.S. pays instructional costs
2. On-Campus Concurrent Enrollment	Yes & UA transfer defined	May, depending on degree	Yes	H.S. administrators may involve faculty to meet with PCC faculty	No, Purchase Orders Suffice	PCC Curriculum Office, Campuses, & H.S. Coordinator	H.S. pays tuition; College pays instructional costs

\*Unlike concurrent enrollment (Model E), student tuition and fees aren't normally paid by funding sources other than students or parents.

\*\*Although college and high school faculty may discuss content issues, PCC credit may be given only for the Board of Governors approved course content.

\*\*\*Once a H.S. student becomes a PCC student, he or she is responsible for following the required procedure to obtain PCC credit.



PROCEDURES AND ISSUES INVOLVED IN TYPES OF HIGH SCHOOL CURRICULUM ARTICULATION

4/15/97

TYPE	INITIAL PROCESS	PERSONNEL INITIALLY INVOLVED	FIRST PRODUCT OR OUTCOME	SUBSEQUENT PROCEDURES	IMPORTANT ISSUES TO RESOLVE	EXPECTED OUTCOME(S)	DATA, MEASUREMENT & EVALUATION
<b>MODEL A: DUAL ENROLLMENT</b>							
1. H.S. student in open enrollment class	Review of possibilities & advantages	Counselor, parent, & student	Completed dual enrollment form	Student enrolls and pays tuition	None, except student success in the course	Student earns H.S. & PCC credits	Student grade to satisfy H.S. graduation
2. Enhanced dual enrollment (Enrollment limited to H.S. students)	Choosing courses for maximum student benefit in PCC programs	PCC Curric. & campus staff/H.S. principal/parent	H.S. students in PCC program course with specific enhancements	Student enrolls, pays tuition (or has scholarship), and participates in enhancements	Site, guidelines for scholarships, selection of enhancements, & funding	Student earns H.S. & PCC credit toward a PCC award/ student sets career goals	Documentation of the students' participation, persistence, & goal attainment
3. Career academies	Planning course & activities/ marketing/ receiving applications	Curriculum office/campus faculty, administrators, and staff	Schedule of academies, marketing activities, application data entry	Academy orientations, enrollment, classes, field trips, etc.	Choice of topics, courses, & special activities/special logistics	Student has immersion in topic with course & career possibilities	Student survey results, report of activities/student enrollment after participation
<b>MODEL B: CURRICULAR ALIGNMENT</b>							
1. Course alignment	H.S. faculty examines PCC content	H.S. Asst. Principal & faculty	Decision(s) re: changes in H.S. course content	Meeting of H.S. and college faculty	Expectation of PCC faculty for course entry	Smooth transition and student success	Documenting enrollment & course success
2. Program alignment	Analysis of programs which may be aligned	PCC curriculum staff	Display of possibilities	Meeting of all concerned parties	Benefits for students, e.g. dual enrollment	Multiple linkages between programs	Monitoring and reporting activity at linkages
<b>MODEL C: COURSE ARTICULATION</b>							
Course Articulation	Dean's approval, H.S. faculty examines PCC course	PCC curric. staff/H.S. & college faculty	Memo of Understanding regarding the articulated credit	Involving students with the "Articulation Certificate"	Credit can be used only for PCC/transfer unlikely	PCC credit for H.S. course after student completes 12 credits	Annual report of number of students and credit earned
<b>MODEL D: SHARED CURRICULUM</b>							
Shared curriculum (Tech Prep Model)	Choice of topic/ analysis of curriculum content	PCC curric. Staff/TP coordinator/ faculty	Curriculum plan in which tasks and skills are within courses	Development of detailed H.S. and PCC course content	H.S. graduation requirements vs. Skills industry needs	Smooth course transitions with no duplication in levels 11-14	Student enrollment, progress, graduation, and placement
<b>MODEL E: CONCURRENT ENROLLMENT</b>							
1. On-site Concurrent Enrollment [Closed]	H.S. & PCC faculty/ administrator discussions	H.S. & PCC faculty & administrators/ PCC curriculum office staff	Identification and scheduling of courses	On-Site marketing, admissions, assessment, and enrollment	Placement of appropriate students & university course articulation	Student earns H.S. and PCC credits	Student grades and quantitative and qualitative analysis by PCC coordinator
2. On-Campus Concurrent Enrollment [May be open or closed]	H.S. & PCC faculty/ administrator discussions	H.S. & PCC administrators/ PCC curriculum office staff	Identification of courses and scheduling closed sections	Marketing, admissions, assessment, and enrollment	Placement of appropriate students	Student earns H.S. and PCC credits & may enter PCC program	Student grades and analysis by PCC coordinator

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**PIMA COMMUNITY COLLEGE**  
**Tucson, Arizona**  
**1997 SUMMER CAREER ACADEMIES**

**Executive Summary**

During the summer of 1997 Pima Community College (Tucson, Arizona), with the support of the Pima and Santa Cruz Counties School To Work Partnership and local business and industry, conducted a series of twenty-one (21) career exploration academies for four-hundred and three (403) Pima and Santa Cruz county high school juniors and seniors. The Summer Career Academies took place on all five Pima Community College campuses, as well as a career exploration offering in Nogales. Each academy was three weeks in length, met Monday through Thursday from 8:00 a.m. to 3:00 p.m., and combined a three credit PCC course (with .5 credit awarded by the students' high school toward graduation) with hands-on experiences, including field trips, guest speakers, and other supporting activities. Of the fifteen occupational areas offered, three featured multiple sessions (Computer Science/Internet, Emergency Services, and Health Care):

<i>Aviation Technology</i>	<i>Court Support Services</i>	<i>Media Technology</i>
<i>Automotive Technology</i>	<i>Emergency Services (2)</i>	<i>Office Technology</i>
<i>Building/Upgrading Computers</i>	<i>Environmental Technology</i>	<i>Semiconductor Tech.</i>
<i>Career Exploration (Nogales)</i>	<i>Health Care (3)</i>	<i>Tucson Youth</i>
<i>Child Care and Parenting</i>	<i>Hospitality</i>	<i>Development</i>
<i>Computer Science/Internet(4)</i>		

Under the School To Work grant, books and materials, transportation, and other associated costs were provided for every student. Two of the academies were funded by alternative sources: the Tucson Youth Development academy and the Intel Semiconductor Technology academy.

The success of the Summer Career Academies is reflected in the following demographic highlights:

- Twenty academies were originally planned; twenty-one were conducted.
- The enrollment objective was 400; the final total was 403.
- Students represented a total of 36 high schools, including a number of alternative schools (TAPP, PPEP Tech., Project Pass, etc.).
- Student success/completion rate was 90.8%.
- Over 65 field trips were offered.
- Academies with the highest enrollment were: Computer Science/Internet (68), Health Care (61), Emergency Services (33).

The students' comments were mostly positive. They indicated that:

- The hands-on experiences were greatly enjoyed and of benefit.
- Programs like this were very important and useful.
- The field trips helped them prepare for their future.

Improvement suggestions from students included:

- The academies need to be longer.
- The College needs new and better equipment/computers.
- Offer more field trips, more hands-on experiences, more variety.



**PIMA COMMUNITY COLLEGE**

**1997 Career Academies  
Final Evaluation Report  
October 8, 1997**

**Educational Services  
Office of Occupational Curriculum**

## Introduction

The Summer Career Academies for 1997 were developed and conducted by Pima Community College as a career exploratory program primarily for high school juniors and seniors in Pima and Santa Cruz counties. The academies were designed to provide high school students an opportunity to gain an understanding of the various career options available within a given vocation or technical profession (for example, the variety of possible job titles in Computer Science).

Funding for the program was provided by the Pima and Santa Cruz Counties School To Work Partnership, Pima Community College, the hospitality industry, the Intel Corporation, and Tucson Youth Development (the latter two organizations funded academies in Semiconductor Technology and Career Exploration, respectively). Financial assistance was provided for all student participants. This sponsorship allowed for the deferment of fees for the course and provided required textbooks and supplies. Field trips, including the necessary transportation were part of the curriculum; therefore, not requiring any additional fees to students. Furthermore, daily allocation for lunch was also available for all participants.

The academies were multi-sensory. All students were assured of a meaningful work-site learning experience including field trips, industry guest speakers, demonstrations, job shadowing, and other occupational experiences. The academies permitted students to examine their current educational attainments and goals while becoming familiar with their career options. They allowed the students to experience, first-hand, life on a college campus as a college student and to earn both PCC credit and credit toward their high school graduation.

## Format and Structure

Objective: to provide area high school students with a multi-sensory career exploration opportunity linked to a three credit hour PCC course.

The academies were three weeks in length, and met four days a week (Monday through Thursday), from 8:00 a.m. to 3:00. p.m. Each academy had as its nucleus a three credit PCC course (for example, the Health Careers Academies were organized around HCA154). The general format incorporated several hours of instruction per day with a variety of supporting hands-on experiences.

Each Academy was staffed by an instructor and a facilitator. The instructor was responsible for teaching the credit class, while the facilitator managed all supplemental organizational and scheduling responsibilities. Further, the facilitator was charged with the constant supervision of the students, as well as arranging all field trips, career activities, and guest speakers. Facilitators coordinated academy student evaluations and instructed the students in how to prepare a portfolio documenting their experience and learning.

Listed next to the campus are the dates during which the academy took place. Those academies indicated as canceled did not generate sufficient student enrollment by the May 1 deadline to warrant their being offered. The addition of the Semiconductor and Tucson Youth Development academies brought the total to twenty-one. The following indicates the data related to location and dates of the academies:

<b><u>Academy Title</u></b>	<b><u>Campus</u></b>	<b><u>Dates</u></b>
Automotive Technology	Downtown	6/16-7/3
Aviation Technology	Downtown	5/27-6/12
Building Technology	Downtown	canceled
Building/Upgrading Computers	West	6/2-6/19
Career Exploration	Community (Nogales)	7/21-8/7
Child Care and Parenting	West	7/7-7/24
Computer Science/Internet (4)	Community	5/27-6/12
	East	6/9-6/27
	West (2)	7/7-7/24, 7/21-8/7
Court Support Services	Desert Vista	5/27-6/12
Desktop Publishing	Downtown	canceled
Emergency Services (2)	East	6/9-6/27 (both)
Environmental Technology	East	6/2-6/19
Health Care (3)	West	6/9-6/27
		6/30-7/17
		7/21-8/7
Hospitality	Downtown	7/21-8/7
Media Technology	West	6/2-6/19
Office Technology	Downtown	7/14-7/31
Semiconductor Technology	West	7/21-8/7
Tucson Youth Development	Downtown	6/30-7/17
World of the Machine Shop	Downtown	canceled

The five Pima Community College campuses offered academies in the program areas specific to that campus (East Campus for Environmental and EMT, West Campus for Technology and Health, etc.). The following list represents, by campus, the twenty-one academies that were offered between May 27 and August 7:

- Community Campus
  - Computer Science/Internet
  - Career Exploration/Nogales
- Downtown Campus
  - Automotive Technology
  - Aviation Technology
  - Hospitality
  - Office Technology
  - Tucson Youth Development
- East Campus
  - Computer Science/Internet
  - Emergency Services(2)
  - Environmental Technology
- Desert Vista
  - Court Support Services
- West Campus
  - Child Care and Parenting
  - Computer Science/Internet(2)
  - Health Care(3)
  - Media Technology
  - Semiconductor Technology
  - Building/Upgrading Computers

## Enrollment Figures

<u>Academy</u>	<u>Enrolled</u>	<u>Completed</u>
Automotive Technology	19	17
Aviation Careers	25	25
Child Care and Parenting	17	16
Computer Science/Internet (CC)	15	12
Computer Science/Internet (EC)	14	13
Computer Science/Internet (WC)	17	16
Computer Science/Internet (WC)	22	21
Court Support Services	20	14
Emergency Services (a)	20	19
Emergency Services (b)	13	10
Environmental Technology	15	15
Health Care (a)	14	13
Health Care (b)	13	8
Health Care (c)	34	28
Hospitality	24	21
Media Technology	17	17
Office Technology	17	16
Building/Upgrading Computers	18	17
Career Exploration (Nogales)	31	30
Semiconductor Technology	25	25
Tucson Youth Development	<u>13</u>	<u>13</u>
<b>Total: 403</b>		<b>366</b>

<b>Original enrollment goal</b>	<b>400</b>
<b>Number of applications</b>	<b>816</b>
<b>Actual enrollment:</b>	<b>403</b>
<b>Student withdrawal (W)</b>	<b>3</b>
<b>Instructor withdrawal (Y)</b>	<b>29</b>
<b>Incomplete (I)</b>	<b>2</b>
<b>Failure (F)</b>	<b>3</b>
<b>Successful completions</b>	<b>366 (90.8% of total)</b>
<b>Full Time Student Equivalency (FTSE) generated</b>	<b>73.2</b>

**Career Academy Completion Percentages**

Academy number and name	Total Enrolled	Total Completed	Non-completes				Percentage complete
			W	Y	I	F	
1a Aviation Technology	25	25	0	0	0	0	100%
2a Automotive Technology	19	17	1	1	0	0	89%
3a Child Care & Parenting	17	16	0	1	0	0	94%
4a Computer Science & Internet	15	12	0	3	0	0	80%
4b Computer Science & Internet	14	13	0	0	0	0	93%
4e Computer Science & Internet	17	16	0	1	0	0	94%
4f Computer Science & Internet	22	21	0	1	0	0	95%
5a Court Support Services	20	14	0	6	0	0	70%
7a Emergency Services	20	19	0	1	0	0	95%
7c Emergency Services	13	10	0	3	0	0	77%
8a Environmental Technology	15	15	0	0	0	0	100%
9a Health Care	14	13	0	1	0	0	93%
9b Health Care	13	8	2	0	0	3	62%
9c Health Care	34	28	0	5	1	0	82%
10a Hospitality	24	21	0	3	0	0	88%
11a Media Technology	17	17	0	0	0	0	100%
12a Office Technology	17	16	0	1	0	0	94%
13a Speed, Memory, Power	18	17	0	1	0	0	94%
16a Semiconductor	25	25	0	0	0	0	100%
17a Tucson Youth Development	13	13	0	0	0	0	100%
18a Career Exploration (Nogales)	31	30	0	0	0	0	97%
<b>Totals</b>	<b>403</b>	<b>366</b>	<b>3</b>	<b>29</b>	<b>2</b>	<b>3</b>	

**Non-completion explanations:**

W = Student withdrawal.

Y = Instructor withdrawal.

I = Incomplete.

F = Failure.

High School Involvement: A total of thirty-seven (37) high schools from Pima, Santa Cruz and Pinal counties were represented, including students from schools such as home schools, charter schools and alternative education programs.

Students were also recruited from the Pima Community College Upward Bound Program which is a program designed for Native American high school students. Two students who completed the Summer Career Academy commuted daily from Sells, Arizona, located on the Tohono O’Odham reservation.

In addition, students were also recruited from the Native American Summer Institute, which is a partnership of the Pasqua-Yaqui Nation, JTPA, Tucson Urban League, TUSD, and the University of Arizona.

<u>School Names</u>	<u>Total Completions</u>	<u>School Names</u>	<u>Total Completions</u>
Ace Charter	8	Primeria Alta Charter	3
Amphi	24	Project Pass	1
Baboquivari	2	Pueblo	27
Canyon Del Oro	16	Rincon	6
Catalina	14	Rio Rico	6
Catalina Foothills	5	Sabino	6
Cholla	25	Sahuarita	3
Desert View	16	Sahuaro	12
Flowing Wells	9	Salpointe	4
Green Fields	1	San Manuel	1
Kino Learning Center	1	Santa Cruz Alternative	1
Marana	23	Santa Rita	3
Mountain View	12	St. Gregory	1
Nogales	15	Sunnyside	50
Nosotros Alternative	1	TAPP - TUSD	2
Palo Verde	17	Tucson	27
Palo Verde Christian	3	University	5
PPEP Tech Charter	5		
Presidio Charter	1	Home School	3
		Unknown School*	7
			366

\*Not indicated on student application. Numerous attempts to retrieve information were unsuccessful.

Highest Summer Career Academy completions by high school:

Sunnyside	50	Cholla	25
Pueblo	27	Amphitheater	24
Tucson	27	Marana	24

Breakdown by fall 1997 high school class:

Freshman	1	(0.002%)
Sophomores	14	(00.04%)
Juniors	171	(00.47%)
Seniors	159	(00.43%)
Class unknown*	<u>21</u>	(00.06%)
Total:	366	

\*Not indicated on student application. Numerous attempts to retrieve information were unsuccessful.

Gender breakdown:

Females:	194
Males:	172

Just over half (eleven) of the Summer Career Academies that took place during the summer of 1997 were repeated from the academies conducted during the summer of 1996:

Automotive Technology	Court Support Services
Aviation Technology	Health Care (3)
Computer Science/Internet (4)	Hospitality

The other ten (10) academies offered this summer provided the students with the following additional career areas from which to choose:

Building/Upgrading Computers	Media Technology
Child Care and Parenting	Office Technology
Emergency Services (2)	Semiconductor Technology
Environmental Technology	Tucson Youth Development
Career Exploration (Nogales)	

## **EVALUATIONS**

### **Overview Evaluation of Repeated Academies**

#### **Automotive.**

6/16-7/3 - The students responded just as favorably this year as last. What they liked the most were the “hands-on experiences.” Ninety-five percent of the students indicated that they would recommend the academy experience to a friend. They also enjoyed meeting other students with the same interests. Some students indicated that certain of the field trips were “boring.”

#### **Aviation.**

5/27-6/12 - The students of the aviation academy were very pleased with both their instructor and facilitator. The students were consistent in terms of which field trips they enjoyed and which they did not. A majority of the students said that the academy helped them to envision a future career, and that they would return for another academy. Roughly half indicated an interest in pursuing their career goals with PCC.

#### **Computer Science/Internet.**

5/27-6/12 - All of the students indicated that they would return for another academy. Most felt that they would pursue their goals with PCC, and that the academy helped them envision a career. The students seemed to feel that not all guest speakers were equally useful.

6/9-6/27 - The majority of students said that this academy helped them to envision a future career and emphasized the value of visiting various workplaces. Most of the students wish to pursue their career goals with PCC and would return for another academy. They also said that the academy was not long enough, and that they wanted to learn more.

7/7-7/24 - The students in this academy really enjoyed creating their own web pages. Again there was a consensus that some guest speakers were not interesting. Many said they would continue to study at PCC, and that they would return for another academy. A majority indicated that the academy helped them envision a future career.

7/21-8/7- As with the other CSC academies, the students agreed that they were helped to envision a future career. About half said they would pursue those goals with PCC. A majority indicated they would return for another academy. The students also indicated that they learned a lot and enjoyed working on the Internet. There was a concern that the field trips were not very interesting.

#### **Court Support Services.**

5/27-6/12 - The students were very pleased with this academy. They enjoyed the field trips and guest speakers. The students especially enjoyed the mock trial. They also appreciated their instructor and facilitator. They would return for another academy and generally felt that their experience helped them to envision a future career. The students felt they learned a great deal, and many indicated that they would pursue their career goals with PCC.

#### **Health Careers.**

6/30-7/17 - All of the students indicated that they were helped to envision a future career, that they would pursue their career goals with PCC, would return for another academy, enjoyed the field trips, and felt the guest speakers were valuable.

**Hospitality.**

7/21-8/7 - This academy certainly helped the students to envision a future career. They had a terrific time on all their field trips, and almost every student said they would return for another academy. The students truly enjoyed their teachers. Some indicated that certain of the in-class activities were more effective than others. Roughly half the students intend to pursue their career goals with PCC.

**Tabular Evaluation with Student Commentary  
Of New Summer Career Academy Subject Areas**

**Child Care and Parenting  
West Campus**

Positive Aspects	Improvements	Worthy of Comment
<p>“This academy has helped me in deciding my future career.”</p> <p>“The field trips and the guest speakers taught me something that I didn’t know before.”</p> <p>“I thought the best thing was the volunteering.”</p> <p>“It was a very fun and educational three weeks. I hope I can do it again.”</p> <p>“It gave me the opportunity to meet fun new people.”</p> <p>“I really learned a lot in only three weeks.”</p> <p>“We got to see how it really is to work in this field of child care.”</p>	<p>“Make the orientation shorter.”</p> <p>“When we have guest speakers they should involve all of us.”</p> <p>“The only thing I would change is to make the course longer than three weeks.”</p> <p>“It was fun but tiring.”</p> <p>“Add one more week.”</p>	<p>“It gave me an idea of what it would be like to be in college.”</p> <p>“I learned how to talk to children and how they develop at a certain age.”</p> <p>“[this academy] taught me how to understand children better.”</p> <p>“Bonnie and Beth Ann were great instructors; I want to thank them for teaching our class!”</p>

**Emergency Services I and II  
East Campus**

Positive Aspects	Improvements	Worthy of Comment
<p>“I liked going to the fire department and doing hands-on work.”</p> <p>“It gives info to decide if I want to pursue that career.”</p> <p>“[the instructors] treated us &amp; expected us to act as adults.”</p> <p>“The drills and presentations were really neat.”</p> <p>“The academy was <u>all around</u> great; NO problems!”</p> <p>“Overall I enjoyed the whole class. I feel it prepared me for the future.”</p> <p>“I have learned a lot of new stuff. This had a good influence on me.”</p>	<p>“Teachers discriminate against ‘problem kids’.”</p> <p>“Need more hands-on.”</p> <p>“There wasn’t much info on federal law.”</p> <p>“Law enforcement was not as valuable, but very interesting.”</p>	<p>“Mike was a good teacher; you could tell he really cared for us.”</p> <p>“[the instructors] helped me a lot with the reality of the jobs, such as hardships and rewards.”</p> <p>“I really learned about CPR.”</p> <p>“...most of all the instructors were cool and fun...”</p>

**Environmental Technology  
East Campus**

Positive Aspects	Improvements	Worthy of Comment
<p>“The guest speakers were amazing;...they really made you think about the way the earth and water work.”</p> <p>“...even more important, I learned about how what I do effects the environment.”</p> <p>“I learned a lot more than I thought I would.”</p> <p>“[the academy] showed me what the work is really like and didn’t try to glorify it.”</p>	<p>“It would have been better if we did more hands-on things on the field trips.”</p> <p>“The least positive aspects were the long class hours and the movies.”</p> <p>“It seemed like we were always rushing things.”</p> <p>“The least positive aspect is that it was only three weeks.”</p> <p>“I think we should do more lab work.”</p>	<p>“I would suggest better food for field trips.”</p> <p>“The field trips, lab work and speakers make this career and its opportunities more realistic.”</p> <p>“I have definitely become more environmentally aware in this course.”</p> <p>“I learned... how to help the environment individually and as a society.”</p>

**Media Technology  
West Campus**

Positive Aspects	Improvements	Worthy of Comment
<p>“The class was really helpful and helped me decide what I want to do for a career.”</p> <p>“Cyndee is a great teacher.”</p> <p>“The hands-on experiences and the teachers were great.”</p> <p>“I really enjoyed everything and everyone. I made new friends.”</p> <p>“Cyndee Wing inspired all the great things I have done at PCC.”</p> <p>“I think you should continue with this kind of program.”</p>	<p>“The college needs new furniture and equipment.”</p> <p>“Teacher was too controlling sometimes.”</p> <p>“It was hard to get up early in the morning.”</p> <p>“The academy should have been longer.”</p> <p>“I wish we had gone to radio stations and T.V. stations.”</p>	<p>“It’s not fair that high schools have more useful and nice equipment than the college.”</p> <p>“Biosphere was a great experience and I had a lot of fun.”</p> <p>“I hope I can come back next year.”</p> <p>“I really enjoyed actually doing the work, not watching.”</p>

## Office Technology Downtown Campus

Positive Aspects	Improvements	Worthy of Comment
<p>“Really enjoyed the hands-on experiences.”</p> <p>“The field trips were cool; we learned a lot.”</p> <p>“I like the career inventory. It helped me narrow stuff down.”</p> <p>“This experience was really good for me; I have a much better idea of my future.”</p> <p>“I wasn’t sure what to expect, but it turned out to be a great learning experience.”</p> <p>“Learning to do spread sheets was neat.”</p> <p>“It was a cool way to spend three weeks in the summer.”</p>	<p>“There was too much time in class; it got boring.”</p> <p>“I didn’t like having to share a computer sometimes.”</p> <p>“It was too hot to go on so many field trips in one day.”</p>	<p>“It was fun working in teams.”</p> <p>“The instructors were fun and treated us like we were real college students.”</p> <p>“This kind of program is good for kids who don’t know yet what they want to do.”</p>

## Building and Upgrading Computers West Campus

Positive Aspects	Improvements	Worthy of Comment
<p>“I really enjoyed learning from the instructor and other people at PCC.”</p> <p>“The most valuable experience was the hands-on experiences.”</p> <p>“I like the class just the way it is.”</p> <p>“I liked the RTD field trip the best.”</p> <p>“We got to learn a lot of new things.”</p> <p>“The field trips were cool.”</p> <p>“It was good overall.”</p>	<p>“Have more equipment and more time.”</p> <p>“Not good guest speakers.”</p> <p>“Hours were too long.”</p> <p>“There was too little networking stuff.”</p> <p>“It would be better if the class lasted more days.”</p> <p>“I think that this class could have moved faster.”</p> <p>“You should have all hardware available to all.”</p>	<p>“The people were nice and taught us a lot.”</p> <p>“Some of the talks and lectures went a bit fast.”</p>

**Semiconductor Technology  
West Campus**

Positive Aspects	Improvements	Worthy of Comment
<p>"I liked working with all the people."            "I enjoyed going on field trips to see what they do and how they do it."            "This academy gave me info to help me decide a career."            "The best field trip was Intel."            "The most positive aspect was the teachers."            "I was able to find out what I want to do now."            "The academy was very informative and cool."            "There was nothing bad about this program."            "My eyes opened up to a career that before I didn't know I wanted to do."</p>	<p>"It was a bit boring at times."            "The field trips were not much fun."            "My only complaint is when someone talks too technically."</p>	<p>"I think a lot of people should go through this program."            "Every field trip was O.K. but the trip to Intel was the best."            "If the cards are right, I will probably end up here at Pima."            "I hope I get another chance to come."            "I would recommend this program to other students."</p>

**Tucson Youth Development  
Downtown Campus**

Positive Aspects	Improvements	Worthy of Comment
<p>"Lots of friendly people."            "PCC really helped me see how it is going to college."            "The teachers treated us like adults."            "I got to explore different types of careers."            "You should have more programs like this with different careers."            "It really helped me to think about my career and staying in school."            "I enjoyed the class participation and discussions."</p>	<p>"Improvements should be in the students."            "You should make the academy more exciting."            "I didn't learn as much as I thought."            "I think you should get more minority teachers."</p>	<p>"Thanks to Kathy for being a friend."            "It was great to be open and say what we want."            "The teachers were all professional and knew their stuff."            "People made you feel at home."            "I loved to have attention from the teachers."</p>

## Career Exploration Nogales Academy

Positive Aspects	Improvements	Worthy of Comment
<p>"I really learned a lot of new things."            "The guest speaker was from the career I am interested in and answered all my questions."            "Before I didn't know what to do, but now I do."            "The guest speakers were experts."            "I learned a lot of things, like writing resumes."            "Now I know that I have a lot of opportunities in life; I can do anything I want."            "It was a great experience."            "[the instructors] really cared for our future."            "The academy helped me be more prepared to get a job."</p>	<p>"I wish this class had been longer."            "Some guest speakers were boring to listen to."            "I would like to do job shadowing for a day."            "More hands-on experiences."            "Should have had field trips."            "Don't have the guest speakers speak too long."            "Needed more field trips."</p>	<p>"I would have liked to have lunch with a person who works in the career I am interested in."            "There should be more variety."            "Next year there should be several more academies like these."            "I am very proud that I attended this academy and would do it again."</p>

### Conclusion and Recommendations

Based on feedback received from all parties directly involved with the 1997 Summer Career Academies program, overall, the general consensus is that the program was an overwhelming success. Students and parents have time and again expressed their gratitude for the opportunity to participate, especially with the financial assistance that was provided. Numerous high school personnel have indicated an eagerness to assist in the recruitment of their students for next summer. Throughout the College, the Occupational Curriculum office staff is highly praised for the efforts that have been demonstrated to ensure the success of the Summer Career Academy Program. The success of the Summer Career Academies is reflected by the following examples:

- Twenty academies were originally planned; twenty-one were conducted.
- The enrollment objective was 400; the final total was 403.
- Students represented 37 high schools from three counties, (Pima, Santa Cruz, Pinal).
- Student success/completion rate was 90.8%.
- Over 65 field trips were offered.
- Native American students from the Tohono O'Odham and Pasqua-Yaqui reservations participated.
- An academy was offered in Nogales, Arizona.

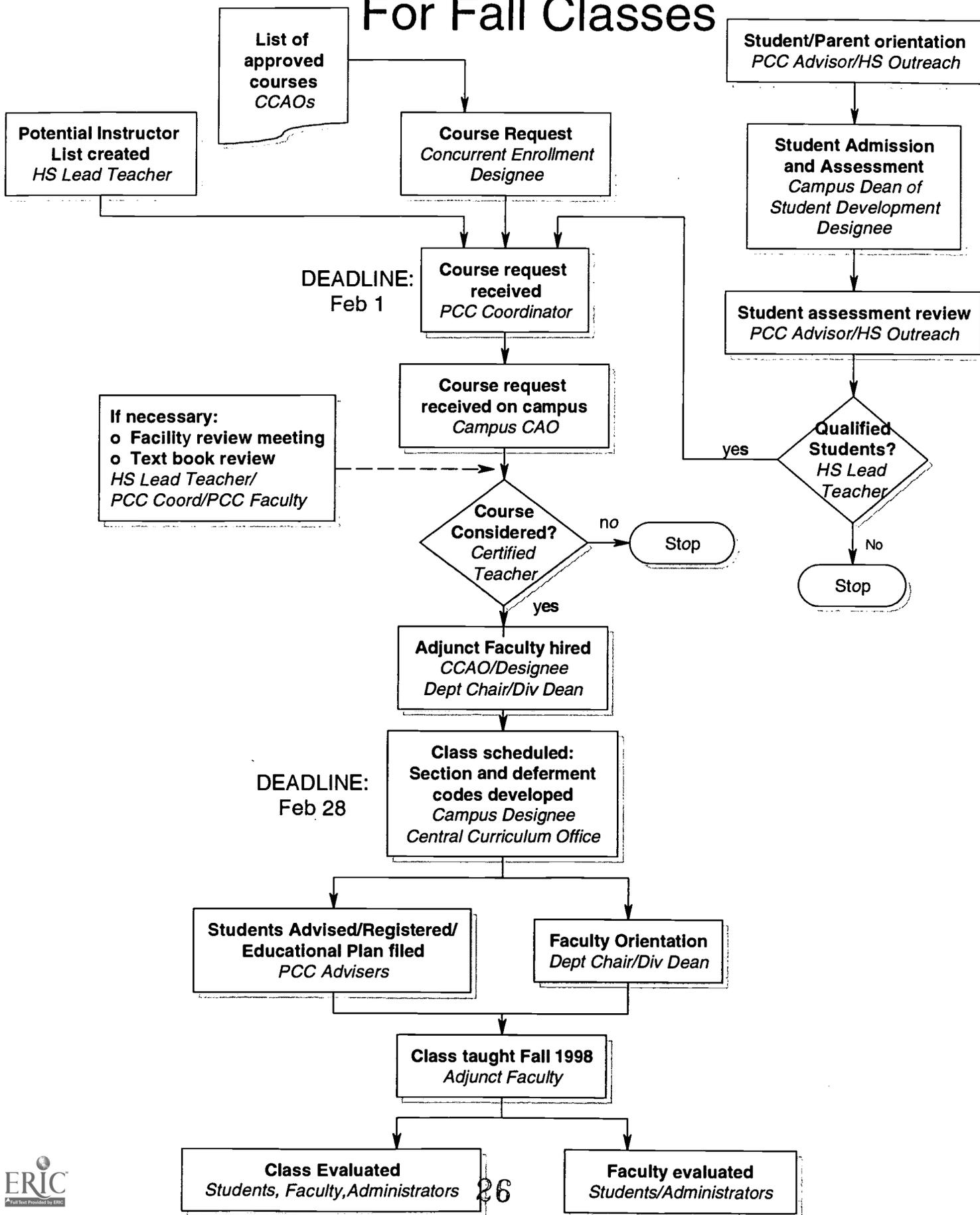
The culminating event, the Summer Career Academy Banquet, was also an astounding success with approximately 1,000 persons in attendance. The highlight of the evening was the 21+ student speakers representing each of the academies that were offered this summer. The testimonials and presentations of their academy experience attest, once again, to the success of the program. Therefore, with the information and evidence gathered we can conclude that this year's objectives were met and possibly exceeded.

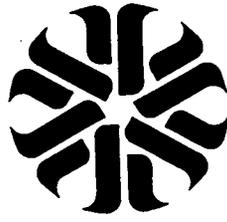
The success of the Summer Career Academies has been noted and documented. None-the-less, our challenge is to continue striving for perfection, building on the strong foundation that currently exists. Improving the program requires that we review and discuss certain issues. Potential areas to consider for coordination and organizational improvements are:

- Hiring and training of facilitators is in need of additional systematization.
- Identify strategies to mitigate student attrition.
- Transportation requests for assistance from the school districts should be submitted in January.
- Direct student recruitment strategies need to be developed and implemented.
- District and campus responsibilities must be reviewed and clarified.
- An improved system for field trip coordination should be developed.
- Additional support staff needs to be hired by February/March.

Finally, it is imperative that the office of Occupational Curriculum continue to receive support necessary for the development, implementation, and successful completion of future Summer Career Academy endeavors. Communication between the various college entities involved in the decision-making process regarding the academies is extremely vital. Interaction must be timely and individual/department roles should be clear. Ultimately, the overall success of this program relies on numerous individuals. Pima Community College and its countless partners can be proud for this grand achievement. The Summer Career Academies are successful because so many believe in its benefits. We must continue to believe.

# On-Site Concurrent Enrollment Course Selection Procedure For Fall Classes





## *Pima Community College*

# **ON-SITE CONCURRENT OCCUPATIONAL COURSES**

Accounting	Aviation Structural Repair
Keyboarding	Aircraft Blueprint Reading
Document Preparation	Powerplant Familiarization
Computer Software Applications	Welding
Internal Combustion Engines	Effective Parenthood
Automotive Brakes	Day Care Programs
Introduction/Building Trades	Machine Tool
Electronics	Technical Drafting

**“School to College Linkage--  
New Models that WORK”**

**OVERHEAD TRANSPARENCIES**

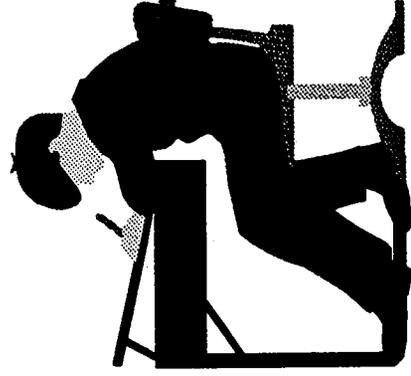
**NCOE PRESENTATION**

**San Antonio, Texas  
October 22-25, 1997**

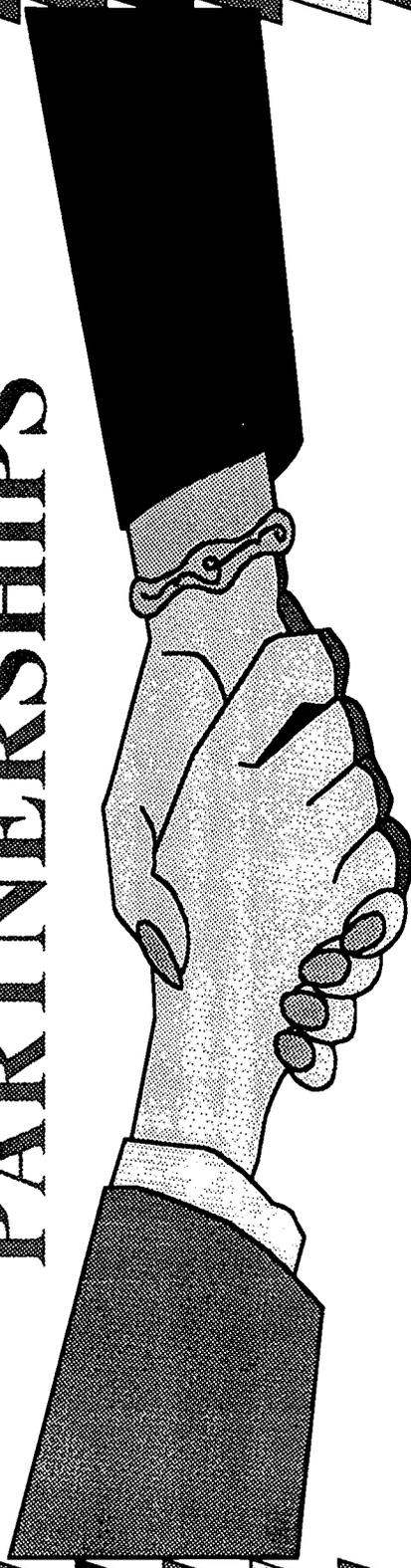
# **PIMA COMMUNITY COLLEGE**

## **SUMMER CAREER ACADEMIES**

**1997**

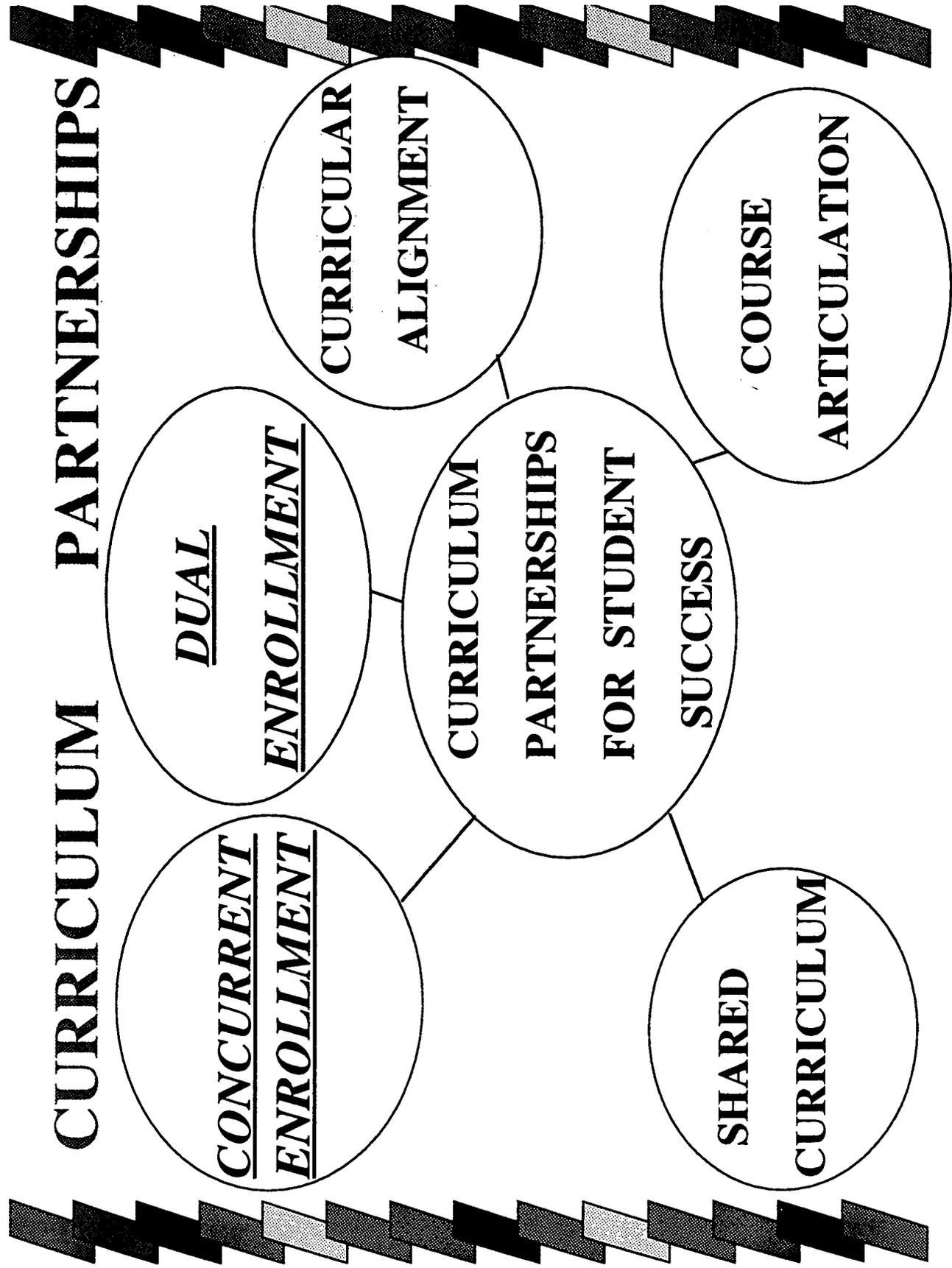


# PARTNERSHIPS



- SCHOOL TO WORK
- INTEL
- HOSPITALITY INDUSTRY
- PIMA COMMUNITY COLLEGE
- TUCSON YOUTH DEVELOPMENT
- PIMA / SANTA CRUZ TECH PREP CONSORTIUM

# CURRICULUM PARTNERSHIPS





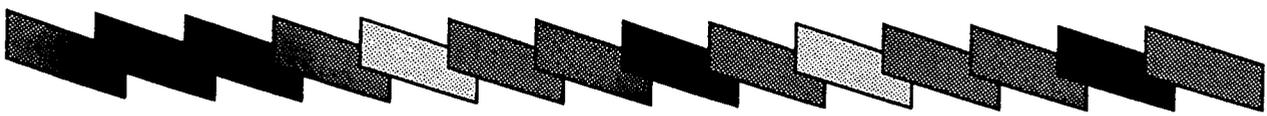
# DUAL ENROLLMENT

- HIGH SCHOOL STUDENT IN OPEN ENROLLMENT CLASSES
- CAREER ACADEMY
- RECEIVE HIGH SCHOOL AND COLLEGE CREDIT
- CREDIT EARNED IMMEDIATELY UPON SUCCESSFUL COMPLETION OF COURSE



# **CURRICULAR ALIGNMENT**

- **HIGH SCHOOL CURRICULUM SEQUENCED TO FIT WITH COLLEGE CURRICULUM**
- **SMOOTH TRANSITION FROM HIGH SCHOOL TO COLLEGE MAJOR**
- **STUDENT PREPARATION ELIMINATES REPEATING COURSE WORK ON COLLEGE LEVEL**



# **COURSE ARTICULATION**

- **COLLEGE CREDIT FOR HIGH SCHOOL COURSES**
- **NO CHARGE TO STUDENT FOR ARTICULATED CREDIT**
- **STUDENT EARNS ARTICULATED CREDIT AFTER COMPLETION OF COMMUNITY COLLEGE**



# SHARED CURRICULUM

- TECH PREP
  - FOUR (4) YEAR SEQUENCE BEGINS IN HIGH SCHOOL JUNIOR YEAR
  - COOPERATIVELY PLANNED CURRICULUM (HIGH SCHOOL / COLLEGE)
  - PROVIDES REQUIREMENTS FOR H.S. GRADUATION/FUNDAMENTALS OF ASSOCIATE DEGREE
- 

# **CONCURRENT ENROLLMENT**

- **COLLEGE COURSES**
- **ON CAMPUS (OPEN OR CLOSED)**
- **ON SITE (CLOSED)**
- **DURING REGULAR HIGH SCHOOL DAY**
- **HIGH SCHOOL AND COLLEGE CREDIT**
- **CREDIT EARNED IMMEDIATELY UPON SUCCESSFUL COMPLETION OF COURSE**



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