

HAWAI'I COMMUNITY COLLEGE PROGRAM REVIEW REPORT

AGRICULTURE PROGRAM

November 30, 2007

Assessment Period: July 1, 2004 to June 30, 2007

Initiator: Clyde Kojiro

Writer: David Ikeda

Program Review at Hawai'i Community College is a shared governance responsibility related to strategic planning and quality assurance. It is an important planning tool for the college budget process. Achievement of Student Learning Outcomes is embedded in this ongoing systematic assessment. Reviewed by a college wide process, the Program Reviews are available to the college and community at large to enhance communication and public accountability.

HAWAII COMMUNITY COLLEGE
PROGRAM NAME
2007-2008

A. Program Effectiveness

- A1. The Agriculture Program supports Hawaii Community College mission by providing “hands-on” program which allows our students to gain practical and theoretical skills in tropical agriculture. These skills allow our students to reach their full potential both in their careers and personal lives.

The following program maps show the Agriculture courses taken by semester for each certificate or degree. A new cohort starts every other year, but students may enter and/or exit at any time. Certificates may be completed in two semesters while the AAS degree requires four semesters.

Fig 1: Map of Associate in Applied Science for Agriculture

Students who achieve the AAS degree have the option to continue their education toward a baccalaureate degree, start their own enterprises, and/or achieve a faster route to mid-management.

Fig. 2: Map of Certificate of Achievement for Agriculture

The Certificate of Achievement map lays out a series of courses for students who wish to gain a sound practical background in agriculture. They would also have the option of continuing on toward achieving the Associate in Applied Science degree.

Fig 3: Map of Certificate of Completion for Agriculture Worker

This Certificate gives the students the skills needed to enter the agriculture field with a variety of skills which are not normally learned quickly on the job. This Certificate does not require any courses in english and mathematics

Fig 4: Map of Certificate of Completion for Landscape Worker

This Certificate gives them the skills to enter into the landscaping field with a variety of skills which are not normally learned quickly on the job. This Certificate does not require any courses in □English and mathematics

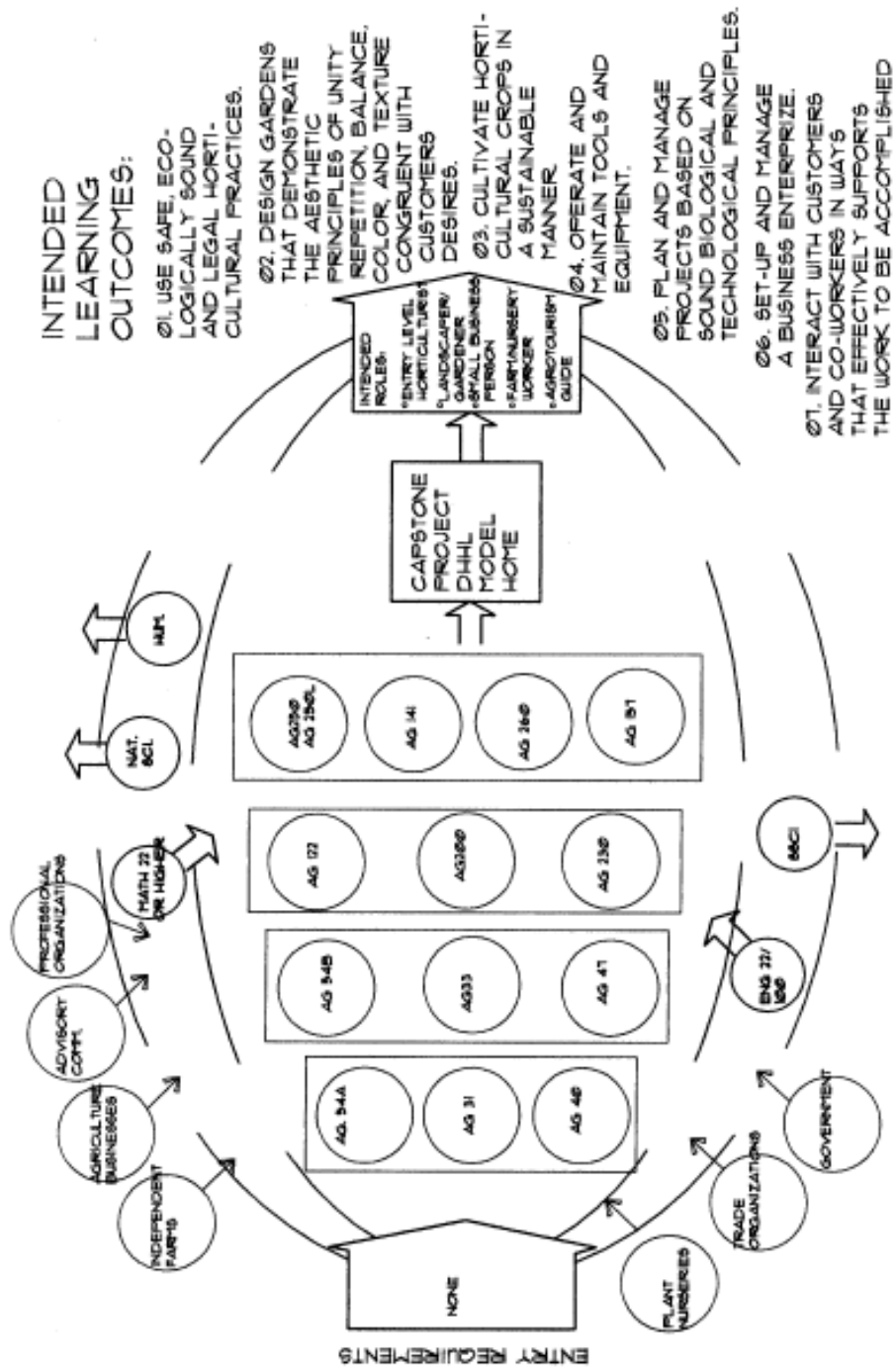


Fig. 1
Associate in Applied Science - Agriculture

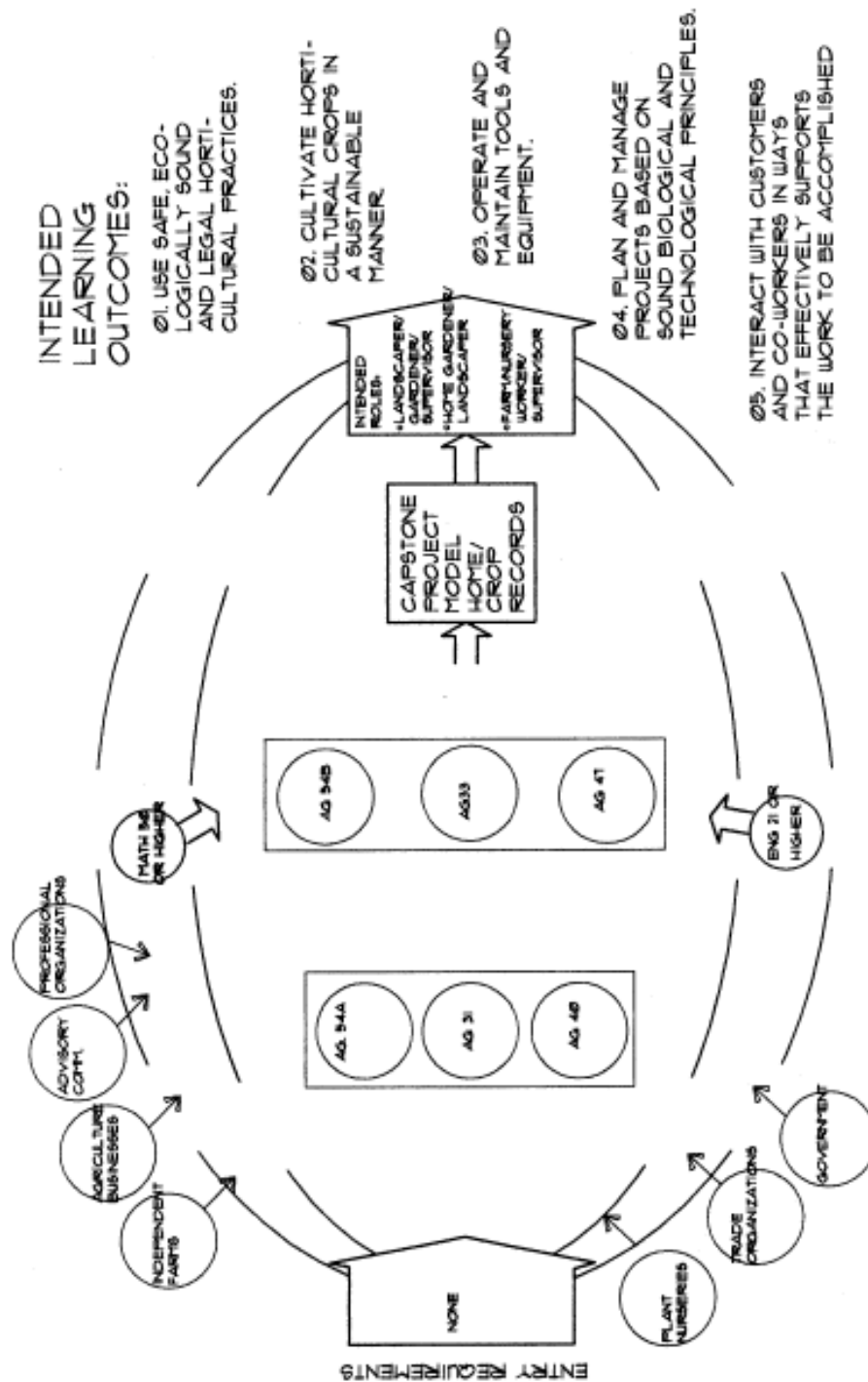


Fig. 2
Certificate of Achievement – Agriculture

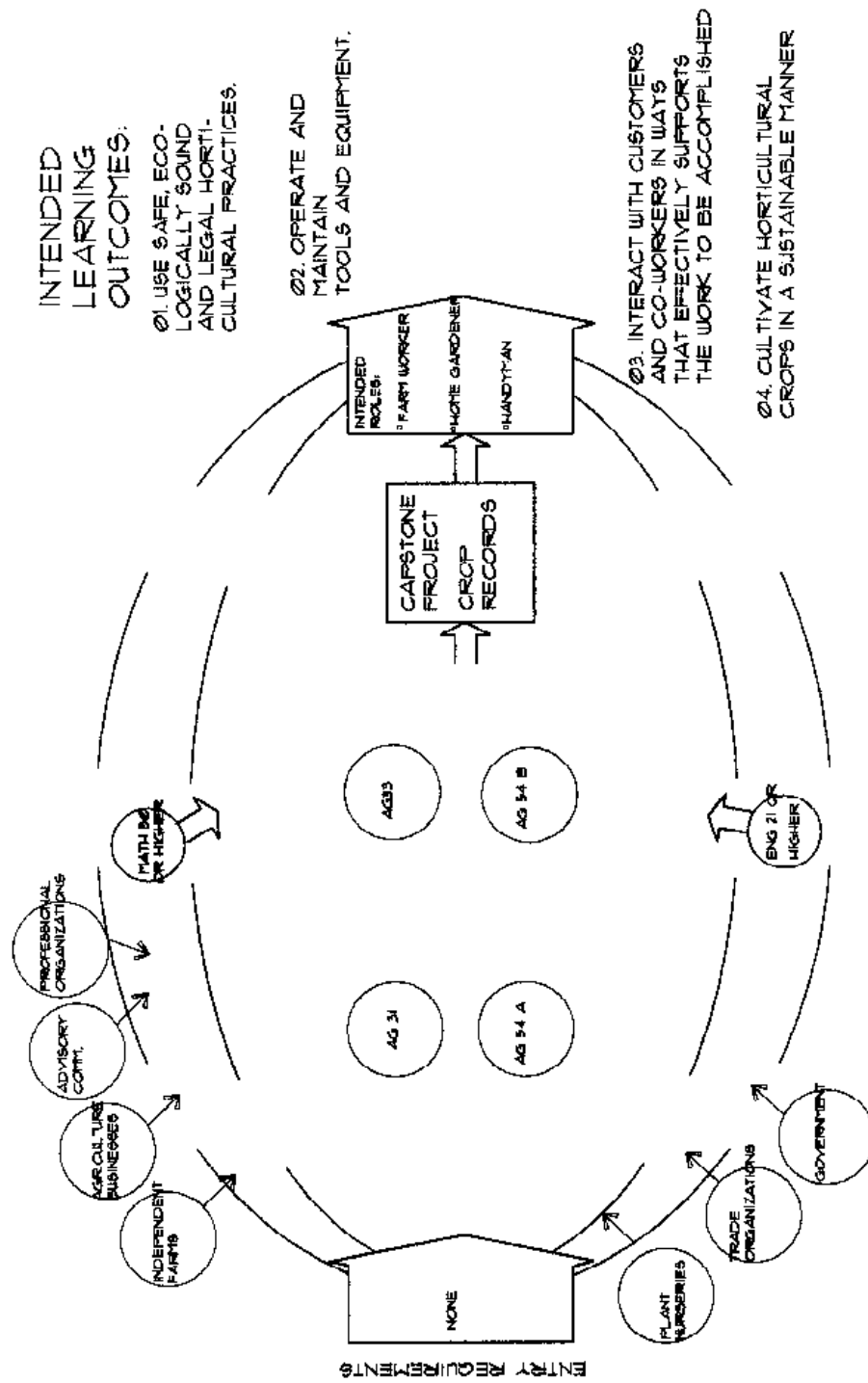


Fig. 3
Certificate of Completion Agriculture Worker

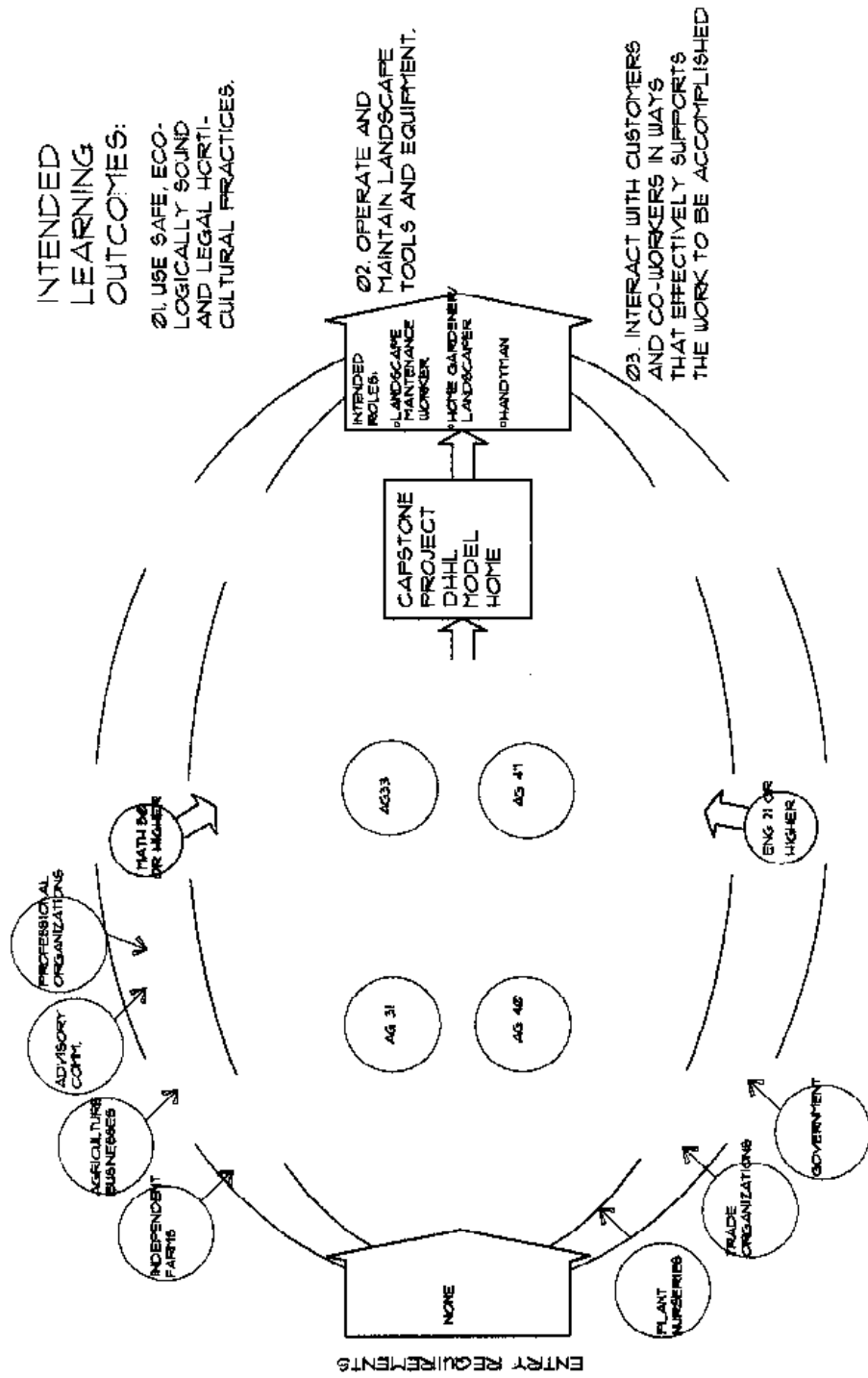


Fig. 4
Certificate of Completion – Landscape Worker

- A2. All program outcomes are assessed by a combination of observation, practical skills, and written examinations or reports. Examinations and practical skills examinations are created by the instructors. Summary of Assessment of Program Learning Outcomes

After this year, students who achieve the Certificate of Completion – Landscape Worker will be encouraged to take the Certified Landscape Technician test. This is a nationally recognized credential for landscape workers.

The following indicates how a program leaning outcome is being assessed:

Program Learning Outcome: **Cultivate Horticultural Crops in a sustainable manner**

Course	Hands on Project	Written Exam or Reports
AG 54A – Trop. Ag. Prod	Planting a crop – student must demonstrate their ability to correctly plant seeds by planting depth, spacing, fertilizing, and orienting of the rows.	Student must write a short report explaining how and where the planting information was found

Table 1—List of Program Learning Outcomes

PLO #1 Use safe, ecologically sound and legal horticultural practices
PLO #2 Design gardens that demonstrate the aesthetic principles of unity, repetition, balance, color, and texture congruent with the customers’ desires
PLO #3 Cultivate horticultural crops in a sustainable manner
PLO #4 Operate and maintain tools and equipment
PLO #5 Plan and manage projects based on sound biological and technological principles
PLO #6 Set-up and manage a business enterprise
PLO #7 Interact with customers and co-workers in ways that effectively supports the work to be accomplished

Table 2—Program Learning Outcomes by Courses (check off which course supports which PLO; add columns & rows as needed; examples given)

Course Alpha/Num	PLO #1	PLO #2	PLO #3	PLO #4	PLO #5	PLO #6	PLO #7
AG 31	X			X			X
AG 33	X			X			X
AG 40	X	X					X
AG 46	X	X		X			X
AG 54A	X		X	X	X	X	X

AG54B	X		X	X	X	X	X
AG 200	X		X	X	X		X
AG 230	X				X	X	X
AG 122	X		X	X			X
AG 250	X				X		X
AG 250L	X			X	X		X
AG 157	X					X	X
AG 260	X	X		X	X	X	X

Table 3—Levels of Implementation of PLO Assessment (for each PLO, Indicate ONE level of implementation; add rows as needed)

	A	D	P	SCQI	Assessment Strategy
PLO #1	X				
PLO #2	X				
PLO #3	X				
PLO #4	X				
PLO #5	X				
PLO #6	X				
PLO #7	X				

Key (reference: Barbara Beno’s letter, 9-12-07; ACCJC’s evaluation of Institutional effectiveness, rubric III): A=Awareness, D=Development, P=Proficiency, SCQI= Sustainable Continuous Quality Improvement

Table 4A—Percentage of Program Courses with SLO’s

<u>100</u> % of Program courses with SLO’s	Of these, <u>75</u> % are being assessed
---	---

Table 4B—Percentage of Program Courses Reviewed within the Previous 5 Years

100 %

A3. Program Strengths and Weaknesses

Based on demand, the program’s health is cautionary. Although the demand for new and replacement positions in the County is higher than the number of majors or graduates, our enrollment remains low. Consequently, the number of graduates also remains low.

The low enrollment influences the other indicators such as efficiency and effectiveness. The data indicates that the program’s health is cautionary or unhealthy.

Strengths

1. Solid and varied hands-on experiences in horticulture
2. Facilities which are relevant to the instruction
3. A curriculum which allows students to leave at various levels of expertise to pursue their personal goals

Weaknesses

1. Low enrollment,
2. Insufficient faculty/staff to maintain the various facilities, participate in non-academic requirements, and teach efficiently,
3. Aging equipment,
4. Inadequate advisory committee
5. A two-year cycle of courses, and
6. Limited success in articulating courses with UH-Manoa and UHH- CAFNRM.

B. Action Plan including Budget Request

The Program needs to find ways to increase its strength, organization, and enrollment through the involvement of more people, looking closely at our curriculum, and upgrading of our facilities and equipment.

Table 5—Top 6 Non-Cost Items (Including SLO & PLO completion, and assessment) (add rows as needed; examples given)

Task:	Academic yr.	Who is responsible	Best Fits which ADP Goal	Addresses which strength or weakness
1. SLO & PLO Completion	2007-08	Program Coord.	D	W1
2. Recruit more active advisory committee members	Ongoing	Program Coord.	C	W4
3. Create a recruiting plan to increase enrollment	2008-09	Prog. Coord. DC, Adv. Comm.	C	W1
4. Explore the possibility of offering courses annually	2008	Prog. Coord. DC, Adv. Comm., VCAA	C, D	W1
Articulate with other than Univ. of Hawaii baccalaureate colleges	2008	Prog. Coord. HawCC Admin.	D, E	W1

Table 6A. —Top 6 Cost Items (add rows as needed; examples given)

Task:	Academic Yr.	Who is responsible	\$ amount & budget category Except R/M	Best fits which ADP Goal	Supported by ADP Resource Requirement? Y/N	Addresses which strength or weakness
1.Hire 1 FTE faculty	2008-2009	Prog. Fac. Adm.	\$61,112. P	A, D, E	N	W1, W2, W4, WE5
2. Purchase a utility vehicle	2008-2009	Prog. Fac.	\$12,500, Eq	E	N	S1
3. Purchase a soil sterilizing cart	2008-2009	Prog. Fac.	\$6,000, Eq.	C	N	S1
4.Purchase a storage container	2008-2009	Prog. Fac.	\$6,000	E	N	S2
4.Purchase a 40 hp diesel tractor with implements	2009-2010	Prog. Fac.	\$40,000, Eq	E	N	S2

Key to abbreviations:

ADP Goals are: A, B, C, D, E

Budget Categories: P=Personnel; S1x=Program Review Special Fund;

SE=Supplies Enhanced; Eq=Equipment

Strengths/Weaknesses are numbered (S1, S2, S3, W1, W2, W3—from A.3)

Table 6B.--Repair and Maintenance

Nature of Problem	Describe Location: e.g. Building(s) & Room(s)
Provide electricity to power irrigation controllers in shade house (\$2,500)	Panaewa Farm, Hilo

Table 7—Equipment Depreciation, if applicable (add rows as needed; examples given)

Program Assigned Equipment (E) and Controlled Property (CP) (List in order of chronological depreciation date)	Category: CP or E	Expected Depreciation Date	Estimated Replacement Cost
1981 Ford 4wd pickup truck	E, \$10102.39	2007	\$45,000
1981 purchased compound & dissecting microscopes	CP, \$1607.60 requesting 4 each	2007	\$11,200

Key to abbreviations:

CP=Controlled Property w/item value \$1K-\$5K
E=equipment w/item value >\$5K;

	AY 04-05	AY 05-06	AY 06-07
AG			
1. Annual new and replacement positions in the State	1064	1064	1064
2. Annual new and replacement positions in the County	109	109	109
3. Number of majors	18	10	11
4. Student Semester Hours for program majors in all program classes	48	27	21
5. Student Semester Hours for Non-program majors in all program classes	21	21	40
6. Student Semester Hours all program classes	69	48	61
7. FTE Program enrollment	4.6	3.2	4.07
8. Number of classes taught	3	3	3
9. Determination of program's health based on demand (Health, Cautionary, or Unhealthy)	C/UH	C/UH	C/UH
10. Average Class Size	6.67	4.33	5.67
11. Class fill rate	41.67%	30.95%	40.48%
12. FTE of BOR appointed program faculty	1	1	1
13. Student/Faculty ratio	18:1	10:1	11:1
14. Number of Majors per FTE faculty	26.87	12.5	16.42
15. Program Budget Allocation (Personnel, supplies and services, equipment)	\$35,283.10	\$40,912.00	\$35,341.10
16. Cost Per Student Semester Hour	\$511.35	\$852.33	\$579.36
17. Number of classes that enroll less than ten students	3	3	2
18. Determination of program's health based on Efficiency (Healthy, Cautionary, or Unhealthy)	C/UH	C/UH	C/UH
19. Persistence of majors fall to spring	61.11%	50%	63.64%
20. Number of degrees earned (annual)	1	1	0
21. Number of certificates earned (annual)	0	0	2
22. Number of students transferred (enrolled) to a four-year institution in UH	0	0	0
23. Perkins core indicator: Academic Attainment(1P1)	71.43%	100.00%	100.00%
24. Perkins core indicator: Technical Skill Attainment (1P2)	90.00%	66.67%	100.00%
25. Perkins core indicator: Completion Rate (2P1)	40.00%	16.67%	50.00%
26. Perkins core indicator: Placement in Employment Education, and Military (3P1)	50.00%	75.00%	100.00%
27. Perkins core indicator: Retention in Employment (3P2)	100.00%	100.00%	100.00%
28. Perkins core indicator: Non Traditional Participation (4P1)	4.76%	30.77%	37.50%
29. Perkins core indicator: Non Traditional Completion (4P2)	.00%	.00%	100.00%
30. Determination of program's health based on effectiveness (Healthy, Cautionary, Or Unhealthy)	C	C	C/UH
31. Determination of program's overall health (Healthy, Cautionary, or Unhealthy)			
32. Number of FTE Faculty	0.67	0.8	0.67