

HAWAII COMMUNITY COLLEGE COMPREHENSIVE PROGRAM REVIEW REPORT

Auto Body Repair & Painting

November 15, 2010

Assessment Period: July 1, 2007 to June 30, 2010

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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**

A. Program Effectiveness

1. Write a brief narrative describing the program and how it supports the College's mission and Institutional Learning Outcomes (ILOs).

The Auto Body Repair and Painting (ABRP) program subscribes to the open door community college philosophy and offers career and technical training in the automotive collision repair, refinishing, and related fields. Both general and specialized courses allow students to select a specialty training, career ladder, or comprehensive training regimen. Students may earn Certificates of Completion in Basic Auto Body Repair or Automotive Refinishing, a Certificate of Achievement, or an Associate in Applied Science degree by fulfilling the requirements of the credential. In addition to the development of technical skills and accrual of knowledge students are inured with developing the work habits and attitudes essential to successful employment in all vocations.

The college's ILOs are imbedded in the instruction that begins at the course level and teaches students; to respect and appreciate the rich diversity of our student population; to properly manage the hazardous materials used in our industry and to malama āina as it is our kuleana to be caretakers of our environment for future generations; to be exposed to the current technologies associated with the industry and have opportunities to develop proficiency that will enhance employability; to set and attain goals for personal fulfillment and which benefits the community we live in. As students progress through the program it is anticipated that as they will develop the skills of the craft, comprehend the ethical mores of society, and upon exit secure gainful employment or ascend to higher aspirations.

2. As a result of a review of the program (e.g. courses, curricula, learning outcomes assessment results, economic impacts, community needs etc.) summarize what changes have been made and why. Attach as **Appendix A** – All completed Learning Outcomes Assessment results.

The program uses annual reviews along with consultations with our Auto Body PCC, Advisory Council members and industry partners to evaluate the state of the program and plan changes that address the needs of the students and community. These reviews have resulted in increased emphasis in strategic areas of instruction, acquisition of new technology, and updates to the curriculum.

Beginning in Fall 2008 the program has completed 3 of 7 PLO assessments with 2 more in progress. In 2008 the program added 10 new Gas Metal Arc Welding (GMAW) machines with automatic welding program capabilities that greatly enhanced the students learning in this critical high skills area that all competent collision repair technicians must possess. The curriculum targets 100 hours of instruction in GMAW and the increased availability and upgraded features of the new machines produced student results that exceeded previous classes. The additional equipment also meant the students wait time for a machine was greatly reduced and they were afforded more hands on time to develop the skills. One downside is that

the facility's electrical system does not allow the use of all welders simultaneously, and may need to be upgraded to make full use of the equipment. In reviewing the F08 Artifact Assessment Report, which was performed with these welders, the evaluators stated the assessment plan validated the SLO and is excellent preparation for industry certification. Their recommendations were to use test materials that match industry testing standards for thickness and type of coating, however the cost of purchasing pre-cut metal coupons shipped from the mainland is too prohibitive for the program's budget. The welders and sheet metal were again factors in the S09 Assessment that examined a structural part sectioning procedure. The mock-up part is again fabricated by the students using lesser quality materials because of cost and to reduce strain on the program's power shear which has difficulty cutting the thick gauge metal and is constantly breaking down. The shear company is no longer producing that model and the parts are obsolete resulting in continual make do repairs. While expensive pre-fabricated props are available the students gain valuable skills performing measurement, layout, cutting, bending, and welding tasks. A replacement unit is very costly but will be included in program budget considerations.

The Fall 2009 assessment of PLO 2 tested the students' awareness and knowledge of safety related practices in the collision industry. A comprehensive exam administered in pre / post format proved that this critical learning outcome is being met at a level required in the industry. This also demonstrates the instructors' belief that even though students may enter the program at low levels of academic preparation it is possible to raise the level of learning to the point required to succeed in this industry.

Although the artifacts of the Spring 2010 Assessment have not yet been evaluated it is already evident that the results are greatly improved over previous attempts of assessing the same area. During that period several events occurred that contributed to the improvements. Several pieces of new equipment were purchased that reinforced and upgraded the refinish portion of the program; a new paint mixing system was put in on consignment by a supportive vendor to replace an older system that had compromised materials which impaired prior results; and a lecturer with expertise in advanced refinish techniques raised the level of learning and student accomplishment. In line with the assessment progression the current assessment plan for Fall 2010, although not part of this report, are glaringly apparent. The current methodology of hand written appraisals is almost defunct in the industry and fails in incorporating current technology in the curriculum. Acquisition of a computerized estimating system should be high on the priority list of program improvements. The significance of maintaining currency of equipment, materials, and training are at the forefront of developing a competent workforce.

As the result of a UHCC ABRP PCC agreement all four campuses have standardized and updated curriculum materials based on the Inter-Industry Conference on Auto Collision Repair (ICAR) LIVE curriculum. The old curriculum (copyright 1994) had been purchased and donated to the college in by the Automotive Body Repair & Painting Association of Hawaii through the efforts of our ABRP program Advisory Council, but had lost currency due to the continuous technological advancements in automotive design, construction and repair. Adopting a uniform curriculum would lay the foundation for articulation within the system, and the ICAR curriculum was chosen as the organization is a collision industry leader in training. With use of the new curriculum students' learning will parallel the professional standards of the industry. The CD based curriculum was purchased with a Perkins grant in 2009, and inaugurated near the end of the Fall semester. Initial survey of student satisfaction is mostly positive however it came to light that while most students are adept at computer use, access to a computer is sometimes an issue. To that end arrangements are in progress for ACU to install computer work stations in the classroom for students to use.

In October 2009, 3 years past the original completion deadline, we were approved to use the newly completed downdraft prep station, and in December the new spraybooth and paint mixing cabin were put into operation. The versatility and increased capacity of these major pieces of equipment allows students to receive training in state of the art facilities and produce superior finishes quicker than in the obsolete unit that it replaced. The spray environment is enhanced by increased lighting, air flow management, and heat curing system which also improves health and safety for the student technicians. The new spraybooth does incur additional costs for increased filtration replacement and propane fuel for the gas fired curing system that will need to be addressed in program funding. However the new equipment is timely as the additional capacity will be needed to meet the new EPA mandate, (Paint Stripping and Miscellaneous Surface Coating Operations [Subpart HHHHHH] effective Jan. 10, 2011), that requires spray coatings be applied within an approved spray enclosure with 98% capture efficiency. The rule restricts open air painting and further mandates the types of approved spray guns, gun washers, supplied air respiratory systems, and training required. These too will need to be prioritized in the program's planning and budget.

One of the quandaries the ABRP program is challenged with is historical student attrition numbers that do not always speak to underlying reasons for the decline. Many students enter the program underprepared both academically and financially. These barriers can quickly impede and even put a halt to their learning and academic progress. The program faculty subscribe to the open door policy and expend copious energies and resources to assist these students succeed knowing that there is a track record of such students working through the program and emerging as productive upstanding community members. Many students drawn to the ABRP program seek specialized training as either body technicians or refinish technicians, and may leave after achieving their goals. Exiting after the first or second semester shows up negatively in the data, but does not reveal that the student has fulfilled their ambition and chose to leave. To address this population the program introduced two new Certificates of Completion (Basic Auto Body Repair and Automotive Refinish) in Fall 2010. In Spring 2010 several students earned the credentials and graduated at that level while others have continued seeking more comprehensive training. Another issue that many of our students struggle with is having to take additional courses to complete the Certificate of Achievement requirements. Often times these are very capable and reliable students, but with constraints of family and work commitments, or simply choose not to take those courses. The added cost and time involved becomes a barrier to their goals and a credential even though they successfully complete all of the major coursework. Following established precedents the related course requirements were removed from the CA requirements, and in so doing removed an impediment to the students' goals.

Program Health Indicators:

The Auto Body program is deemed healthy in the areas of Demand, Efficiency, and Effectiveness. The program sustained healthy calls in both Demand and Efficiency from the previous year and improved Effectiveness from Cautionary in 08-09 to Healthy in 09-10. The improvement in the latter category is boosted by higher percentages of "Successful Completion" and "Persistence" stats. In addition a marked increase in the "Unduplicated Degrees/Certificates" and other "Certificates Awarded" validates the actions taken by the program to retain students through completion and credentials awarded. The one area that did not show improvement and may be considered a weakness is the number of low enrolled classes. So even while class size, persistence, and completion have improved, low enrolled classes have lagged. The

program's historical attrition patterns, (as explained in the previous section), is a combination of circumstantial dynamics, and can fluctuate year to year. Factors such as the state of our economy and jobs availability often influence student counts overall. Unable to find employment people may choose to return to college to learn a new trade or upgrade skills. Once work becomes available however some choose to reenter the workforce even if they have not completed the program. Another facet of today's student is they are often not fully cognizant of the physical demands of the industry, are challenged by attempts to develop proficiency in the hand skills of the trade, and are stymied by the advanced levels of knowledge required to succeed in today's automotive repair industry.

The charge of the program instructors is to take all who cross the threshold of our program's doorway and develop the individual's potential and instill the work habits and attitudes that will help them achieve their goals and become successful in their lives.

Perkins IV Core Indicators (2008-09)

The program successfully met three of the six areas, 3P1 Student Retention or Transfer; 5P1 Nontraditional Participation; and Nontraditional Completion, but fell short of goals in the other three areas.

1P1 Technical Skills Attainment: Only 55.56% out of the 90% goal attained this level. All of the 5 concentrators that met the standard successfully completed the major coursework with GPA greater than 2.0. These were second year students who continued on to successful completion of the program. All of the remaining 4 concentrators that stopped attending and fell below 2.0 were first year students.

The program's adherence to the college open door policy can be a contributing factor in not achieving this performance indicator. Students entering the program unprepared, with unrealistic expectations of program and college requirements, and overwhelmed with pervasive personal problems often stop attending regularly or drop out all together. Although data is not specific analysis would point out that two of the concentrators were a couple and when one lost a parent, and had difficulty coping with the loss both dropped out without withdrawing. Likewise the other two suspected concentrators had personal problems outside the college with family and personal relationships and stopped attending. While the instructor reached out to the students and offered opportunities for them to continue and complete the coursework the students did not take advantage of the offer and were subsequently failed.

Many young students encounter situations that they do not know how to deal with and will often walk away from commitments and responsibilities when overwhelmed. The low performance figure may be attributable to the personal challenges that these students faced that prevented them from achieving academic success. When instructors believe students are experiencing difficulties they will refer them to counseling, and encourage them to seek qualified professional help.

2P1 Completion: The program level was 22.22%, or 2 students out of 9 who had stopped the program and earned a degree or certificate. Far below the 44% goal desired. Perkins uses an unduplicated count for this indicator and does not consider concentrators awarded multiple credentials as meeting the goal. In the 2008-09 academic year three of the five concentrators earned multiple degrees and certificates which may account for the discrepancy in the Perkins data provided and the instructors' records. Five students completed the program and graduated in Spring 2009 and received multiple credentials that has been verified through STAR reports. Calculating that 5 of 9 students stopping the program received a degree or certificate would result in a 56% figure, exceeding the 44% goal.

4P1 Student Placement: The data provided states that there is only 1 concentrator and he was not placed in employment, military service, or an apprenticeship program within UI quarter following completion. Instructor records identify four male student completers who could possibly be the individual statistic. Three went on to another CTE program at the college, one who continued on at the college, but not in a CTE program. The concentrator may not have sought or was unable to find a job as this was in the midst of the economic malaise that saw rising unemployment, and very limited employment opportunities.

Program Learning Outcomes

The first two assessments of PLOs (1&3) recognizes the validity of the assessment plans, and the value of the activity as measured against industry standards and expectations. These assessments duplicate industry certification and require demonstrated proficiency in high skill areas. The more advanced task (PLO #3) revealed some flaws that will be addressed in subsequent trials. The lapse between initial training in the first semester and the advanced evaluation in the fourth semester needs reinforcement in the interim, more guidance prior to testing, and a more reasonable time constraint. Analyses of the assessments results confirm the necessity to sustain currency of equipment, facilities, and processes to meet the training objectives and produce the expected outcomes. Results of the third PLO (#2) assessed has just recently been completed and confirms that the results satisfies expectations and has significant importance to the industry. Assessment of PLO 4 conducted in Spring 2010 will be reviewed this semester. Assessment of PLO 6 was administered in early Fall 2010 with artifacts collected, and will be evaluated in Spring 2011. Overall perceptions of assessments conducted thus far point out that the PLOs have validity and are relevant to industry expectations. Further, while the program has made progress upgrading some of the equipment and curriculum, other major technologies are near obsolescence or in need of extensive upgrading. Student evaluations help corroborate this as they regularly complain of the lack of equipment, outdated technology and facilities as having negative effects on their learning. The program will conduct an assessment of the last PLO #7 in Spring 2011, and continue the cycle with adjustments as they become apparent.

Program Strengths and Weaknesses

Enumerate the top three strengths and weaknesses

Strengths:

1. Hands on technical training including “real world” live lab work that emulates industry style training and develops solid foundations in basic skills.
2. Program provides training that addresses the diverse learning styles of the local student population, many of whom are at lower levels of preparation and hindered by socio-economic pressures.
3. Faculty have strong connection within the industry and have developed supportive relationships that benefit the program and college.

Weaknesses:

1. Obsolete or outdated technologies that do not meet current standards of the industry, and hamper student learning. Limited quantity of equipment hinders skills development and timely progress. Physical plant in need of upgrades and renovation.
2. Program faculty need to increase and establish regular cycle of professional development and technical training to maintain currency in instruction, new technologies and processes. Constantly evolving technological developments in vehicle construction, materials, safety features, and repair processes mandate continuous training in order to sustain a relevant curriculum and keep abreast of the industry.
3. Student entry level and effects on success through program. Conundrum of serving all comers, many at low levels and having poor learning skills while teaching highly technical and intensive hand skills vocation. Establishing entry level requirements may raise student qualities, but be a barrier to admission and have negative student count numbers.
4. **Discuss the progress the program has made in** meeting the goals set in the last Comprehensive Program Review.

The top three goals targeted in the last Comprehensive Program Review (2003-06) were:

Teach the basic fundamentals of auto body repair and painting, salable skills, good work attitudes, and strive to for 60-80% of its graduates with 100% job placement with entry-level skills or higher, into the auto body collision repair field or related occupations. With the remaining graduates guided to other field of occupations or unrelated decisions.

A survey of program graduates that could be accounted for reveals that 39% found employment in auto body related businesses, 52% continued on to other programs of study at the college, and 9% were employed in jobs outside of the automotive field. Analysis of the statistics reveal most of the employment occurred at the beginning of the cycle when the economy was in good shape, and later most chose to continue their education as the economy stagnated and fell off into recession. It is also noted that recent graduates are more likely to move away in pursuit of employment.

As the economic recovery is expected to be gradual and with repressed employment opportunities students that are not able to secure jobs are encouraged to consider continuing their studies in related fields. Cross training in another industry will add value to the student as a more versatile graduate possessing wide ranging skills and knowledge will be more appealing to employers. Like many other programs we have experienced students coming into our program from another and believe this will be a growing trend.

Provide students hands-on experience through pseudo projects, from donated body panels and vehicles to meet the competencies needed to do live projects. Team up students into groups of two or three and assign teams various types of live projects. Instructors need to solicit and select a minimum of six to ten live projects annually according to students' skill level from inter-department, faculty, staff, student/family and community.

Almost unanimously our students voice a preference for hands-on learning as the most effective learning style. The program faculty are in agreement that it is the most essential component of learning and developing proficiency in the hand skills. They provide a multitude of activities and opportunities for the students to build a solid foundation of basic skills, and encourage independent practice beyond the regular class schedules. Students work as individuals as well in groups to develop teamwork and leadership skills.

One of the strengths of the program is the experience students gain working on live lab projects that replicate real world working conditions and include students interacting with customers. The value of this experience compared to the pseudo work on mock-ups used in practice is evident in terms of preparing students for employment and developing the kind of work habits and attitudes required in the workplace. Live lab projects encompass the full range of subjects covered in the instruction and far exceed the minimal number of projects targeted. Our advisory council has concurred that this is the most significant factor in transforming students into job ready technicians, and encourage us to continue this training especially in the area of developing work habits and attitudes. The work performed also recovers costs expended for practical exercises and supplements program funding.

Keep abreast of changing technology by attending workshops and seminars offered here, neighbor islands and also on the mainland. Implement that information into the curriculum and teaching.

As the economy turned down opportunities for local training waned as companies pulled back on delivering training, and only through the generosity of a few supportive vendors and industry partners have we been able to sustain a modicum of keeping up with the ever changing technology. The program hosted several industry workshops (6) and certification clinics (4) which brings the technology here to our campus. Also attended two vendor sponsored mini expositions and completed two welding certifications on Oahu during this period. No ICAR classes were held here at the college between Spring 2003 and Spring 2010, and only by attending session at NACE in Las Vegas in 2004 were the instructors able to obtain the training. While some support for outside training is available through the college, faculty must often expend personal funds to travel and attend training sessions. Unforeseen circumstances cancelled planned attendance at major conferences the last two years, but plans are being made to attend the next conference in Fall 2011.

Instructors also participated in a variety of professional development workshops and classes both on and off campus. They have also begun using the new computer based ICAR LIVE Curriculum which has required adopting new presentation modes and changes in course content and lesson plans.

5. List the program's top 3 goals/plans for the next Comprehensive Review period. Briefly describe evidence that supports these goals/plans.
1. Acquisition of new technology and replacement of obsolete equipment to match industry standards. New technology especially in electronic and computerized modes are sorely missing from the program and some of the equipment now in use is outdated sometimes to the point of obsolescence.
 - The industry long ago moved away from manual hand written estimates to computerized appraisal, report writing, and communication. Without specialized appraisal program software students are consigned to gathering information from texts, hand-writing estimates and calculating costs. The process is slow and usually fall short in completeness and accuracy.

- Electronic measuring systems, laser, sonar, and three dimensional, are the norm in the industry as vehicle construction methods and materials require close tolerance (0-3mm) and 3D measuring to properly diagnose and repair collision damages. The frame and body straightening equipment currently in-house were designed for cars built 40 years ago, and not suitable for current vehicle construction. Students are unable to learn the high end skills in this fundamental repair area and live work is limited by lack of appropriate equipment.
- The heavily used metal working equipment, power shear and box brake, have become obsolete as parts are not available. Frequent breakdowns and band aid repairs by the instructors have until now extended the life of the equipment, but an inopportune failure without remedy may halt instruction in progress.
- Pending EPA mandate, Paint Stripping and Miscellaneous Surface Coating Operations Subpart HHHHHH, will require upgraded spray painting equipment and process changes. All spray painting operations are affected by this new rule and compliance is mandatory for the program.

2. Seek professional development opportunities to improve teaching and sustain currency in field. Program instructors have limited opportunities locally to attend professional and technical industry training. Many sessions are not offered on-island, and off-island conferences are expensive and often conflict with the academic schedule.

- Annually attend the National Auto Body Congress and Exposition (NACE) in October (last attended 11/2004), and /or Specialty Equipment Manufacturers Association (SEMA) in November to participate in classes and seminars to gain first hand insight and learn about the most up-to-date developments in the automotive manufacturing and repair industries. These two immense conferences bring together international manufacturers, vendors, and participants for one week each in a venue that allows multiple opportunities to access the latest information and training.
- Attend Inter-Industry Conference on Auto Collision Repair (ICAR) classes to attain new technical certifications and qualify for ICAR course certifications that will improve instructional delivery of the new curriculum.

3. Facilities improvement

- Remove old in-ground hoist and renovate second classroom
- Remove and dispose of in-floor pulling system and relocate above ground hoist out of painting area
- Install anchor pot pulling system (replaces in-floor system) in work bays
- Upgrade electrical system – increase circuits, standardize outlets
- Install security fence around building

B. Action Plan for Program Improvement: Complete Tables 1-4 to provide justification for program budget requests

Table 1—Prioritized Top 3 Non-Cost Items
(examples are given in *italics*; delete & replace with Program’s items)

Task:	Academic yr.	Who is responsible	Justifications	
			How does it improve program effectiveness?	Addresses which strength or weakness*
1. Full implementation of new ICAR LIVE Curriculum	2010-11	Program Instructors	Students will learn using the most up to date curriculum produced by the collision industry leader in training.	W3
2. Seek extramural funding for equipment replacement	2010-11	Program Instructors	Student’s learning and skill development are hampered by outdated technologies. Acquiring new and updated equipment will better prepare students to enter the workforce.	W1 & S1
3. Pursue training opportunities for faculty, locally and out of state.	2010-2012	Program Instructors	Faculty must be at the forefront of learning and teaching, and maintain currency in the field in order to effectively deliver the instruction.	W2

*Strengths/Weaknesses are numbered (S1, S2, S3; W1, W2, W3) and taken from A.3

Table 2 —Prioritized Top 3 Cost Items (“G” funded requests only)

(examples given in *italics*; *delete & replace with Program’s items*)

***Budget Categories: P=Personnel; S1x=Program Review Special Fund; SE=Supplies Enhanced; Eq=Equipment (>= \$5K)**

****Strategic Outcomes Goals and Performance Measures are: A1.1, B4., C1., D3., E2., etc.**

Priority	\$ amount & budget category* Except R/M	Justifications		If currently grant funded, please explain: put date when funding ends and indicate HawCC commitment to support, if any
		Best fits which Strategic Outcomes Goal and Performance Measure(s)** and how?	Addresses which strength or weakness?	
1. Purchase body and frame alignment machine with electronic measuring system designed for current vehicle construction repairs.	\$125,000 Eq.	Goal C. Students learning with current technology will gain enhanced knowledge and salable skills thereby increasing employability. New technology will also quell student complaints that the program’s current equipment is outdated and of insufficient quantity	W1 & S1	
2. Purchase power shear to replace obsolete equipment that does not meet size and capacity demands.	\$15,000 Eq.	Goal E. Current equipment is inadequate and obsolete with no parts availability. The machine is used regularly and subject to frequent breakdowns and make-do repairs.	W1 & S1	
3. Replace various spray painting equipment to comply with new EPA mandate.	\$ 18,600 Eq.	Goal E. New EPA rule mandates upgrades in refinish application, cleaning and recycling equipment; facilities; application procedures; and training.	W1 & S1	

Table 3.--Repair and Maintenance

Nature of Problem	Describe Location: e.g. Building(s) & Room(s)
Relocate above ground hoist out of painting area, and remove disabled in-ground hydraulic hoist.	Bldg. 321 Rooms 201 & 218
Install security fence around building to limit ingress to work and storage areas for safety and security reasons.	Driveway surrounding Bldg. 321
Increase electrical system capacity to enable higher use to match demands. Upgrade and increase 220V electrical outlets for various equipment uses.	Bldg. 321 Rooms 201 (Shop area), and 219

Table 4—Equipment Depreciation, if applicable(examples given in *italics*; *delete & replace with Program's items & add rows as needed*)**Key to abbreviations:**

CP=Controlled Property w/item value \$1K-\$5K

E=equipment w/item value >\$5K

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
Whitney Frame Alignment System	E	1992	\$125,000
Whitney Bending Brake	E	1992	\$12,000
Diarco Power Shear	E	1992	\$13,000
Kar Grabber Frame System	E	1992	\$32,000
South Bend Lathe	E	1992	\$11,700
Sullair Compressor	E	2001	\$10,000
Toshiba Satellite A40 Lap Top Computer	CP	2005	1,500
Lincoln Squarewave TIG Welder	CP	2006	\$4,000
Uni-Ram Solvent Recycle System	CP	2007	\$4,000
DuPont Mini Colornet System	CP	2007	\$4,500
Chromavision	E	2007	\$6,500
Dedoes 88 Mixer Base	CP	2009	\$1,500
Satorius Scale	CP	2009	\$1,000
IRT 302 Paint Cure System	CP	2009	\$4,500
3-D Combination Universal Laser	CP	2009	\$5,000
Lincoln Precision TIG 185	CP	2012	\$3,000
Pro Spot STRSW	E	2012	\$13,500
Dell Latitude E6500 Laptop	CP	2013	\$1,300
Miller Spectrum 375 Plasma Cutter	CP	2015	\$1,350
Miller Spectrum 375 Plasma Cutter	CP	2015	\$1,350
Miller 350P Welder	CP	2015	\$4,600
Island Clean Air Dust Extractor	E	2016	\$7,600

Pro Spot PR2 Welder	CP	2016	\$1,500
Robinair 34288 A/C machine	CP	2016	\$3,600
Uni-ram UR700	CP	2016	\$1,900
Uni-ram UR700	CP	2016	\$1,900
Branick Strut Spring Compressor	CP	2017	\$1,500

Items in the shaded area are listed on the program inventory and have been fully depreciated. In some cases the equipment has remained in service beyond the expected life, and others are in disrepair and in need of repair or replacement. As these items retain some resale or salvage value they continue to be listed, while items deemed obsolete, broken beyond reasonable repair and having no appreciable value have been omitted from the list.

C. Table 5—Data Elements

Part I. Quantitative Indicators

Overall Program Health: Healthy

Majors Included: ABRP

Demand Indicators		Academic Year		Demand Health Call
		08-09	09-10	
1	New & Replacement Positions (State)	126	581	Healthy
2	New & Replacement Positions (County Prorated)	14	11	
3	Number of Majors	30	41	
4	SSH Program Majors in Program Classes	552	589	
5	SSH Non-Majors in Program Classes	12	0	
6	SSH in All Program Classes	564	589	
7	FTE Enrollment in Program Classes	19	20	
8	Total Number of Classes Taught	23	23	

Efficiency Indicators		Academic Year		Efficiency Health Call
		08-09	09-10	
9	Average Class Size	12.0	12.5	Healthy
10	Fill Rate	66%	70%	
11	FTE BOR Appointed Faculty	2	2	
12	Majors to FTE BOR Appointed Faculty	15	20.5	
13	Majors to Analytic FTE Faculty	16.9	23.1	
13a	Analytic FTE Faculty	1.8	1.8	
14	Overall Program Budget Allocation	\$117,505	\$205,325	
14a	General Funded Budget Allocation	\$117,505	\$186,226	
14b	Special/Federal Budget Allocation	\$0	\$19,099	
15	Cost per SSH	\$208	\$349	
16	Number of Low-Enrolled (<10) Classes	11	11	

Effectiveness Indicators		Academic Year		Effectiveness Health Call
		08-09	09-10	
17	Successful Completion (Equivalent C or Higher)	73%	89%	Healthy
18	Withdrawals (Grade = W)	11	2	
19	Persistence (Fall to Spring)	72%	75%	
20	Unduplicated Degrees/Certificates Awarded	6	10	
20a	Degrees Awarded	4	4	
20b	Certificates of Achievement Awarded	4	6	
20c	Academic Subject Certificates Awarded	0	0	
20d	Other Certificates Awarded	0	14	
21	Transfers to UH 4-yr	0	0	
21a	Transfers with credential from program	0	0	
21b	Transfers without credential from program	0	0	

Distance Education: Completely On-line Classes	Academic Year		
	08-09	09-10	

22	Number of Distance Education Classes Taught		0	0	
23	Enrollment Distance Education Classes		0	0	
24	Fill Rate		0%	0%	
25	Successful Completion (Equivalent C or Higher)		0%	0%	
26	Withdrawals (Grade = W)		0	0	
27	Persistence (Fall to Spring Not Limited to Distance Education)		0%	0%	

Perkins IV Core Indicators 2008-2009		Goal	Actual	Met	
28	1P1 Technical Skills Attainment	90.00	55.56	Not Met	
29	2P1 Completion	44.00	22.22	Not Met	
30	3P1 Student Retention or Transfer	55.00	68.18	Met	
31	4P1 Student Placement	50.00	0.00	Not Met	
32	5P1 Nontraditional Participation	16.00	17.24	Met	
33	5P2 Nontraditional Completion	15.25	16.67	Met	

Last Updated: October 19th, 2010

Appendix A

Learning Outcomes Assessment Results

PLO #1 assessment was conducted in Fall 2008, with artifacts assessed in Spring 2009. The evaluators confirmed the exercise is a significant assessment of student learning and recommended that some parameters be adjusted to make the assessment more relevant. Program equipment is in poor condition and purchasing pre-cut test pieces is cost prohibitive and would take away from students' skills development. Will seek replacement of power shear

Auto Body Artifact Assessment Report

Evaluation Team Members:

1. Gary Nakamura – Owner Ron's Auto Body & ABRP program graduate
2. Garrett Fujioka – Owner Concept Auto & ABRP program graduate
3. Lloyd Sanborn – Associate Professor, Auto Body Repair & Painting

Program Learning Outcome to Be Assessed:

PLO#1 Demonstrate entry-level knowledge and skills required for the safe operation of tools and equipment necessary to perform basic repairs on modern automobiles.

Artifact Sampling:

Team members randomly selected 5 sets out of the 9 (55%) students GMAW welding test coupons to assess. Each set contains six samples of three welding joints (lap, butt with backing & plug) welded in two positions (flat vertical and overhead). The evaluators were informed that the procedure simulated ICAR welding parameters, and that the destructive tests were performed only on those samples that passed initial visual inspection. The evaluators visually examined the artifacts and using a standard ICAR welding gauge assessed the quality of the work submitted.

Evaluation Team Members Results:

Of the thirty samples examined three did not pass the standards. One for the weld bead being longer than allowed; one for a porosity and gap in the weld bead; and one for not tearing out the required length of the weld in the destructive test. All failures were submitted by different students.

The evaluators confirmed that the results validated the SLO and is excellent preparation for industry certification.

Course of Action Using the Assessment Results;

The team members suggested the practice could be more realistic if the materials used were thicker (20 gauge was used vs. 18 gauge standard to reduce cost) to match the ICAR standard, and that uncoated metal replace the galvanized pieces for health concerns.

PLO #3 assessment was conducted in Spring 2009, and artifacts evaluated in Fall 2009. The results were extremely poor yet valuable in that feedback from the evaluators will be applied to future attempts employing this same task. As with the previous assessment a reduction in material thickness that the props were constructed of was made due to cost of readymade props and the capabilities and condition of the power shear. Although not stated in the report thinner gauge metal may have affected some results.

Auto Body Artifact Assessment Report Fall 2009

Evaluation Team Members:

1. Bert Kinoshita –HawCC ABRP Lecturer
2. Kelton Chang – Ace Auto Glass, Manager
3. Garrett Fujioka – Owner Concept Auto Refinishing & ABRP Advisory Council

Program Learning Outcome to Be Assessed:

PLO#3 Demonstrate structural panel repair techniques and advanced welding skills.

Artifact Sampling:

Team members examined 5 samples out of the 6 (83%) students' sectioned rocker panels that were completed in the Spring 2009 semester. One was incomplete and was not included in the assessment. The sectioned rocker panel simulated ICAR structural sectioning and welding qualification testing. The artifacts were assessed according to the ICAR test criteria for dimensional correctness, joint fabrication, and weld quality. Although some panels did not pass the initial visual inspection, all panels were evaluated.

Evaluation Team Members Results:

All of the samples examined did not meet the ICAR standards. They were rejected for not following directions and substandard fitment and welding. The shortcomings included; sectioning the wrong end of the rail; poor fit up and alignment; and excessive flaws in the welding.

Although the evaluators confirmed that the results validated the intended SLO, it was questioned whether or not there was any substantial value as the total failure would indicate poor preparation or a lack of knowledge and skill required to pass the test.

The instructor noted that there is a large gap of time between the students' initial welding instruction in the first semester and the assessment done in the fourth semester that may have affected the test results.

Course of Action Using the Assessment Results;

The team members suggested that students be afforded some preparation time to brush up on their welding skills prior to the testing, because of the long time between the initial (1st semester) welding practicum and the test (4th semester).

Although a step by step video of the sectioning procedure is viewed prior to the test a live instructional demonstration would better clarify the procedures.

The time limit should also be increased as the student should not be expected to perform the complicated tasks in industry standard time.

PLO#2 assessment was conducted in Fall 2009, and the artifacts assessed in Fall 2010 due to a delay in receiving the artifacts previously. The evaluation team praised the instructor for the excellent results in this critical area of study. Recommendations for future use of this instrument will be taken under consideration.

Auto Body Artifact Assessment Report Fall 2010

Evaluation Team Members:

1. Ken Shimizu – AMT Instructor
2. Mike Saito – ABRP Instructor
3. Tyler Kukona – program graduate & peer mentor

Program Learning Outcome to Be Assessed:

PLO#2 Apply proper safety procedures and regulated compliance standards applicable to the auto collision and refinish industry

Artifact Sampling:

Team members examined 17 samples of the Auto Body Safety Exam pre and post tests administered in the Fall 2009 semester. The pre test scores ranged from 57% to 100% correct with the class average of 80.4%. All post test had been corrected to 100% correct answers.

Evaluation Team Members Results:

All of the samples examined showed vast improvements, with the exception of the one sample that had 100% on the first attempt.

The evaluators feel the test is very comprehensive and reflects the safety practices of the industry. They all agreed that this is critical knowledge that students must retain and practice and the rigor of this test at the onset of the program is important to ensure students understand the significance of safety in their studies and work.

Assessment validates the SLO has been achieved.

Course of Action Using the Assessment Results;

The instructor should be commended for the instruction that resulted in such excellent marks. As for the test itself, while comprehensive there was some redundancy that should be vetted before future testing. Also inclusion of Blood Borne Pathogens Test with the Safety Test seemed incongruent and thought should be given to splitting the two tests.