

UNIVERSITY OF HAWAI'I SYSTEM ANNUAL REPORT



REPORT TO THE 2010 LEGISLATURE

Annual Report on
The Construction Academy Curriculum

HRS 304A-1144
Act 234, SLH 2006

November 2009

THE CONSTRUCTION INITIATIVE BACKGROUND

The Construction Academy began in 2004 with a \$1.4 million grant from the U.S. Department of Labor. This grant started a pilot program whereby the University of Hawai'i's Honolulu Community College (HCC) partnered with eight Department of Education high schools on O'ahu—Kahuku, Kailua, McKinley, Mililani, Pearl City, Radford, Waipahu, and Waialua—to prepare high school students with the technical, academic, and employability skills necessary to pursue a career in the construction industry. The initial results of this federally-funded academy model displayed such great potential that in late 2005 many associated with education and construction felt it warranted expansion.

By late 2005, the construction and building industry found itself in a dire situation. Construction projects and developments could move no faster unless there were more qualified workers for the job sites. In late 2005, the industry approached HCC to request its assistance in educating and training a greater number of qualified construction workers. In a true industry-education partnership, HCC, with its experience in the pilot Construction Academy as well as its long history in Apprenticeship Training, developed a comprehensive proposal (the "Construction Initiative") that encompassed both high school education (Construction Academy) and post-high school career training (Apprenticeship).

In session 2006, the Hawai'i State Legislature passed Senate Bill 2980 SD2, HD1, CD1, which appropriated \$5.4 million to expand the Construction Academy to other public high schools on O'ahu as well as on the islands of Kaua'i, Maui, and Hawai'i, and to increase Apprenticeship Training at Honolulu, Hawai'i, Kaua'i, and Maui Community Colleges.

THE CONSTRUCTION ACADEMY

Our mission is to prepare high school students with the technical, academic, and employability skills necessary to pursue a career in the construction industry.

From servicing over 200 students at 8 pilot schools during the 2005–2006 school year, the Construction Academy has grown to a capacity of over 2290 students in 36 high schools statewide in the Fall 2009. In this pre-apprenticeship program, students actively participate in an integrated classroom setting that promotes the use of math, reading, and writing skills as they engage in building and construction activities. At the end of the course, students build real world projects such as children’s playhouses and storage sheds to test the skills they have learned throughout the year. This hands-on approach to learning requires students to apply skills in math, communication, construction technology, problem solving, and most importantly, teamwork.

CONSTRUCTION ACADEMY STATEWIDE ENROLLMENT SUMMARY

SCHOOL YEAR 07-08 through 09-10

Community College	Hawaii			Honolulu			Kauai			Maui			Total		
	07-08	08-09	09-10	07-08	08-09	09-10	07-08	08-09	09-10	07-08	08-09	09-10	07-08	08-09	09-10
Participating High Schools	9	9	9	15	16	17	3	3	3	7	7	7	34	35	36
Building & Construction 1	214	251	275	477	614	766	142	130	27	153	213	163	995	1208	1231
Building & Construction 2	46	52	61	119	163	231	15	35	81	25	86	96	195	336	469
Mechanical Drawing	n/a	n/a	n/a	110	209	59	n/a	n/a	n/a	n/a	n/a	n/a	110	319	59
Drafting Technology 1	45	50	33	96	112	299	n/a	n/a	n/a	98	78	123	236	240	455
Electricity and Electronics	n/a	n/a	n/a	157	117	76	n/a	n/a	n/a	n/a	n/a	n/a	157	117	76
Total	305	353	369	959	1215	1431	157	165	108	276	377	382	1697	2220	2290

*09-10 enrollment counts reflect Fall 2009 semester registration only.

Participating High Schools SY 2009-2010

Hawai'i Community College		Honolulu Community College		Kaua'i Community College		Maui Community College	
Hilo	Konawaena	Campbell	Mililani	Kapaa		Baldwin	
Kau	Laupahoehoe	Farrington	Nanakuli	Kaua'i		Lahainaluna	
Keaau	Pahoa	Kailua	Pearl City	Waimea		Lana'i	
Kealakehe	Waiakea	Kaimuki	Radford			Hana	
Kohala		Kalaheo	Roosevelt			Maui	
		Kahuku	Waialua			Moloka'i	
		Kapolei	Waianae			King Kekaulike	
		Leilehua	Waipahu				

The statewide implementation of the Construction Academy model continues to make progress. The four participating community colleges have completed the University of Hawai'i System Articulation Agreement for its carpentry and architectural, engineering and CAD technology programs. Remaining flexible to the individual needs of each high school and its surrounding communities remains an essential element of implementation. A brief description of the progress being made by each community college campus is provided in the appendices of this report.

APPRENTICESHIP

The second component of the Construction Initiative is focused on improving and expanding apprenticeship training. The University of Hawaii Community Colleges currently administer the Related Instruction portion of apprenticeship training for most of the non-union and union construction industry apprenticeship programs. Substantial increases in apprenticeship enrollments in recent years strained the campuses' personnel resources, facilities and equipment. Additional funding was needed to more adequately meet the building industry's demands for training. The general fund appropriations received included allocations for support staff, lectureship costs and supplies and equipment.

Due to the current slump in the construction industry, enrollments in the 2008-2009 academic year (6954) did decrease from the previous year (7530). However, enrollment levels remain well beyond those in pre-Construction Initiative years. For example, in the 2004-2005 academic year that immediately preceded the funding of the Construction Initiative, there were approximately 2060 fewer apprentices enrolled than in 2008-2009. The Assistant Registrar who was hired in Fall 2008 and whose primary responsibility is record keeping for the apprenticeship program has provided much needed help with attendance records, grades and in generating reports such as cumulative earned hours that are used by apprenticeship coordinators to track their students. She assisted with registration and explored ways to streamline and improve data gathering and reporting processes. She is currently involved in planning revisions to our record keeping system that will need to be implemented if the University stops requiring social security numbers for admissions and registration and is also assisting in the conversion of our attendance record keeping system from daily logs to one in which only class total hours and grades are collected and retained. As reported earlier, the other campuses have much fewer apprentices so their appropriations did not include funds for additional positions. The Apprenticeship Offices at these other colleges have had to obtain support from other departments on their campuses.

Position:

	FTE Position Allocated	FTE Position Filled
Administrative Profession Technical	1	1

The funds earmarked for lectureship costs helped the College retain a staff of approximately 190 instructors. During the past academic year, wages for approximately 37,550 instructor hours (715 apprenticeship classes) were paid with these funds. Maui Community College also received an allotment for lectureship with which they paid wages for approximately 4600 instructor hours (72 apprenticeship classes). The other campuses did not receive allocations for lectureship so instructors' payroll had to be funded from other sources.

Despite the slight downward trend in the last year, apprenticeship enrollments remained elevated on all campuses this past year and are expected to remain at about these levels in the current academic year. At this point in the Fall 2009 semester, with a month or so remaining in the semester, enrollment at HCC is already at approximately 3,000. In Spring 2010, the College may even experience a modest increase in apprenticeship enrollment because Hawaiian Electric Company recently received approval from the State Apprenticeship Council to begin two Lineman programs and the Associated Builders and Contractors organization is in the process of submitting proposals for a new Elevator Mechanic program and resurrecting their Roofers program.

Due to the almost unprecedented numbers of apprentices on the campuses in recent semesters, shop equipment was over taxed and materials and supplies depleted. The Colleges used their supplies and equipment budgets to replace old equipment, purchase new types of equipment and replenish shop supplies and materials. This funding enabled the Colleges to replace equipment that were outdated and/or unsafe and purchase different kinds of equipment that programs utilized to expand the scope of their training. For example, CNC software was obtained for the Sheet Metal program to expand their CNC capabilities, a contractors table saw was purchased for the Masons to replace their obsolete model, new welding machines were purchased for the Welding and Refrigeration programs to replace worn out older models, electric conduit benders were bought for the Electrical and Refrigeration programs to enabled their instructors to teach an alternative method to manual pipe bending, and a scissors lift and a scaffold set were purchased for the Painters to expand their training to include the safe and proper use of these types of equipment. Funds from the supplies budget were used to purchase materials such as sand and concrete for the Masons, lumber for the Carpenters, electrodes for the Welding shop, and oxygen, argon and acetylene gases for the Boilermakers and Ironworkers

In summary with the additional funding, the University of Hawaii Community College Apprenticeship Offices were better able to serve their training programs. The Assistant Registrar at Honolulu Community College has worked to ensure the accuracy and integrity of apprenticeship records and improve data gathering and dissemination procedures. The funding for lectureship costs has helped the College satisfactorily fund our very full schedule of classes. Allocations for supplies and materials have enabled the Colleges to at least partially restock shop consumables that constitute huge and growing expenses as the costs of materials continue to increase dramatically. Perhaps the most significant beneficial outcome of this funding is that Colleges have been able to purchase much needed equipment. Departments have purchased equipment to replace old, outdated and/or unsafe models and types of equipment that were earlier not available for training. Therefore, in several significant ways, the Colleges have and will be able to more completely meet the training needs of the construction industry.

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HAWAI'I COMMUNITY COLLEGE

Construction Academy classes on the island of Hawai'i continue to be offered in nine of the ten identified public high schools on the island. Enrollment for 2009-10 is 369 students, an increase of approximately 5% from the previous year. The number of sections and average class size has increased slightly. In May 2009, a student from the first Construction Academy cohort with his Associates of Applied Science in Carpentry from Hawaii Community in May 2009, receiving a variety of honors for his exemplary work in the program. Graduates of the Construction Academy continue to articulate to the UHCC Community College system and apprenticeship programs, fulfilling the vision of the program.

Construction Academy personnel in working with the union apprenticeship program are adjusting curriculum and assessments to focus more on teaching math and vocabulary as well as promoting safety awareness and eye hand coordination. Basic math and measurement are critical to success according to the union. Understanding architectural and construction vocabulary is also essential to the ability to read and interpret plans. It seems many apprentices have the eye hand coordination but have difficulty reading construction plans. The union summarized apprenticeship shortfalls as follows: if students can do the math they can work to journeyman level; if they can read the plans, interpret vocabulary, and follow specs, they can be a working foreman and run jobs; and if they can do all three plus have the ability to write comprehensibly, they are prime for superintendant or contractor status. As a result of these discussions, a math assessment was developed and given on a trial basis to students' spring 2009. It indicated students were very weak in measuring and related math skills. During summer, instructors participated in an education pedagogy course and also focused on ways to increase student math skills. The math assessment was given to new students' fall 2009 and will be given to the same students toward the end of the spring 2010 term to assess their learning.

The Construction Academy held its 2nd annual Safety-First Hand Tools Face-Off in May 2009, inviting Big Island high school students taking Construction Academy Classes to visit Hawai'i Community College and participate in a series of appropriate challenges. The competitive events tested the students' use of hand tools and safe practices in the areas of joint construction, stud

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framing, nailing, and measurement calculations. Participation increased to 7 schools participating compared to 2 in the first year.

All eleven positions allocated to the Construction Academy are currently filled: one clerk and seven non-tenure track, full-time temporary, 11-month faculty, have been hired. The construction academy coordinator retired June 2009, returning as .5 casual hire fall 2009.

	FTE Position Allocated	FTE Position Filled
Home-Based Instructors:	6	6 FTE/2 Casual Hires
Traveling Instructors	2	1 FTE/.5 FTE Casual Hire
Counselor (funds used for Instructors)	1	n/a
Clerical	1	1
Coordinator (Allocated as a 7th home-based instructor)	1	.5 FTE Casual
	11.00	11.00

HONOLULU COMMUNITY COLLEGE

Honolulu Community College continues to increase school participation with the addition of Kapolei High School in school year 2009-2010. Student interest continues to be on the rise with an increased enrollment of over 200 students.

Post-testing with the ACT® ASSET numerical skills test is being used to determine Construction Academy student performance in math. Honolulu Community College determined that a scale score of 42 is needed for students to place into *Math 24, 50, and 53*— the entrance mathematics courses required by most HCC building and construction-related degree programs; and the level students will be tested at for acceptance into a typical apprenticeship program. Students who score at a 42 or better are considered to have passed the test. Construction Academy student participants have consistently demonstrated a need to improve their math skills. One of the issues that the instructors are facing is the wide range of math skills that students bring with them to the program. The table below demonstrates the range of students’ success in the ASSET testing. Of the students who took the ASSET test in Building and Construction 1 only 26.17 percent passed the test as contrasted by those students in Drafting Technology 2 were 73.33 percent have passed test ASSET test. Our faculty continues to stress the importance math in the industry and integrated math in all projects.

Course	Grand Total	% Passed
Building & Construction 1	428	26.17%
Building & Construction 2	112	35.71%
Directed Studies---IET	6	66.67%
Drafting Technology 1	88	43.18%
Drafting Technology 2	30	73.33%
Electricity & Electronics	33	45.45%
Electronics Technology 1	28	53.57%
Mechanical Drawing	30	50.00%
Grand Total	755	34.57%

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The Construction Academy counselor provides direct services to academy students at the high school. Services include classroom presentations and one-on-one counseling in completion of college and employment applications, financial aid, resume writing, and preparing for job interviews. Soft skills training in time management, stress management, communication, note taking and test taking are also part of the services package provided by the Construction Academy counselor.

Honolulu Community College Construction Academy program currently has one vacant faculty position. Due to the current budget short fall, the vacancy will not be filled.

Positions:	FTE Position Allocated	FTE Position Filled
Home-Based Instructors:	16	15
Traveling Instructors	4	4
Administrative Profession Technical	1	1
Clerical	1	1
Counselor	1	1
	23.00	22.00

Honolulu Community College hosted the 3rd Annual Hawaii Construction Career Days event. The partnership included the Hawaii Department of Transportation, Hawaii Local Technical Assistance Program, Department of Labor and Industrial Relations, the Federal Highway Administration, Union Apprenticeship programs and more than a hundred volunteers. In total, there were over 1000 students who were bused to the two day event. One (1) private and seventeen (17) public high schools as well as Youth Build and Youth Challenge alternative programs attended the event. There were many hands-on activities to engage the students. One student reported on the evaluation form, when asked what they enjoyed the most, "Visiting different exhibits and getting the chance to participate in activities and win prizes. I also learned new information about wages for different companies." Students were able to experience heavy equipment, visit educational displays, and see and experience demonstrations of the various trades available in the construction industry.

Honolulu Community College Construction Academy hosted its first summer school program in the summer of 2008. In the summer of 2009 the Construction Academy Summer Bridge 2009 expanded to include students from the Youth Challenge program. The program offered community

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college credit in CARP 20 Carpentry Basics, for three (3) credits, IS 103 Introduction to College, for one (1) credit, and AEC 81 Architectural, Engineering and CAD Technologies for one (1) credit. Students also were required to attend a math remediation class each morning before attending their technical class. Part of the student experience during the summer program included exposure to the various trade areas on the HCC campus such as welding, sheet metal, and electricity. A total of thirty nine (39) students participated in this six week program. Fifteen (15) of the senior participants indicated the following post high school plans.

Honolulu Community College	
Carpentry.....	5
Liberal Arts	
Pre-Engineering.....	2
Pre-Nursing.....	1
Undecided	2
Automotive Tech	1
Welding.....	1
Leeward Community College	
Liberal Arts: CENT.....	1
UH Manoa	
Engineering.....	1
Architecture	1
Total.....	15

The Summer Bridge program increased its enrollment from 9 participants in 2008 to 39 in the summer of 2009. Planning is currently underway to recruit students for the summer of 2010.

Honolulu Community College was able to complete a follow-up survey of high school senior participants who graduated in June 2009. Graduating seniors were asked to provide contact information at the end of the school year and were then called by a Construction Academy instructors in October 2009. A total of three hundred and one (301) students provided contact information. Of these students, instructors were able to contact one hundred and seventy four (174) students or fifty eight percent (58%) of the 2009 graduates who had participated in the Construction Academy program on O`ahu.

Of the students contacted, thirty four (34) graduates or nineteen percent (19.5%) reported that they were involved in construction-related activities through apprenticeship, education, or direct employment. This is a decline of almost half of the students who responded in 2007. The ability to find employment in the construction industry is difficult given the current economic climate. Students are being encouraged to continue their education at the post-secondary level to be better prepared to enter the job market when the construction industry take a turn and the demand for qualified workers is again on the raise. Details of the survey results are provided in the following tables. Construction Academy will continue to pursue these students and other graduates from the program to assist in its program improvement efforts.

Post-High School Graduate Survey Results
Honolulu Community College
 Participating Seniors Class of 2009

Summary Table

* Construction Related Fields
 Total of 174 Respondents

Post-high school plans	#	%
Apprenticeships	3	2%
College	98	56%
* Construction-related majors	26	15%
Military	6	3%
Uncertain	15	9%
Working	65	37%
* Working in Construction	5	3%

(note: some apprenticeships are listed concurrently with work)

Apprenticeship Breakdown

Carpenters Union	2
Shipyard	1

College Breakdown

BYU	1	Moor Park, CA	1
Chabot College	1	Northwest Community College	1
Chaminade University	2	Oregon State	1
Colorado State	1	Remington College	1
Eastern Arizona	1	University of Hawaii at Manoa	6
Heald College	2	Unspecified	3
Honolulu Community College	29	UTI	1
Kapiolani Community College	11	Waianae Leeward College	1
Leeward Community College	31	Windward Community College	4
		Grand Total	98

Work Breakdown

* Construction-Related Employment

Air National Guard	1	Papa John's	4
*American Piping and Boilers	1	Pearl Country Club	1
B&B Industrial Cleaners	1	Pizza Hut	1
Baskin-Robbins	1	POW Football	1
Cheesecake Factory	1	Queens Medical Center	1
Commissary	2	Rad Motorsport	1
*DKI-Restoration/Zippy's	1	Real Estate	1
Don't know	1	Red Lobster	1
Family business	3	Red Lobster/Magic of Polynesia	1
Farrington HS Engineering Academy	1	Safeway	2
Foodland	1	Sam's Club	1
*Hawaii Safety Systems	1	Star Market	1
Hide and Cooke Contractors	1	Subway	1
Hollister	1	*Sun Tech Kailua	1
Honolulu Community College	1	Tamura's	2
Hot Dog Stand	1	Tanioka's	1
Island Air	1	Tony Auto Car Wash	1
*JDH Construction	1	Triple RRR	1
Kona Pancake House	1	US Air Force	1
Koolina	1	US Army	2
Longs	1	US Army National Guard	1
Ma Okina Farm	1	US Navy	1
McDonalds	1	USS Recycling	1
Muddy Water	1	Water Park	1
Navy Exchange	1	YMCA	2
Pacific Air Cargo	1	Zippy's	2
Panda Express	1	Zippy's/Coach	1
		Grand Total	65

(note: some graduates worked while attending school/apprenticeships/a second job)

College Major Breakdown

* Construction-related major

Major		Major	
Accounting	1	*Engineering	2
*Architecture	3	General Education	1
Engineering and CAD		Math/Business	
Agriculture	1	Graphic design	1
*Architecture	4	History	1
Automotive	8	Liberal arts	32
Business	3	Nursing	1
*Carpentry	5	Oceanography	1
Chemistry	1	*Pre-engineering	1
Clinical medicine	1	Radiology	2
Computer science	1	*Sheet metal	1
Digital media	1	Undecided	5
*Electrical	7	Unspecified	10
*Electrical engineering	2	*Welding	1
EMA Training	1		
		Grand Total	98

MAUI COMMUNITY COLLEGE

The Maui Community College Construction Academy (CA) program, now in its fourth year, serves students in the seven high schools located on Maui, Molokai, and Lanai. Enrollment in the program has grown, from 377 in school year 2008-09 to 382 in 2009-10, despite cuts in the Department of Education (DOE) budget that reduced the number of classes offered in several of the high schools. The following are some of the accomplishments of the past year, made possible by continued legislative funding of the program:

- Students in all seven Maui County high schools completed projects in their classes according to professional guidelines and Construction Academy curriculum requirements. The projects included professionally detailed playhouses that were donated to childcare centers; sturdy benches for county parks; a 16 ft. by 26 ft. covered pavilion for high school student use; and a number of other structures completed for various worthwhile purposes. As they carried out the projects, students gained hands-on practice in professional construction skills as well as in reading, writing, mathematics, communication, and teamwork.
- Twenty-two high school seniors who had taken part in the Construction Academy program enrolled at Maui CC in fall 2009. This is a 55% increase from fall 2008.
- Renewable and sustainable energy practices, e.g., solar sky lighting, photovoltaic energy, and wind power, were incorporated in all aspects of the educational programs.
- Informational and planning meetings were held with Maui County DOE teachers, principals, and CTE coordinators.
- Maui CC Construction Academy faculty worked with high school teachers to consistently implement the articulated curriculum.
- CAD software was made available to high school classes.
- CA faculty members received training and conducted workshops on architectural CAD software, safety, green design, and sustainability in the construction industry.
- CA high school students were escorted on tours of sustainable wind and solar installations on Maui, Lanai, and Molokai, where professionals conducted demonstrations and answered questions.

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- The Construction Academy counselor has regularly visited all seven high schools, making presentations in individual CA classes, assisting students with academic planning and goal setting, and answering questions about such things as financial aid, skills testing, and student housing.
- A system has been implemented that allows any high school student earning a B or better in CA classes that are articulated with a Maui CC class to receive college credit for that class.
- Portfolios were printed, assembled, and distributed to participating high school students for use as part of the assessment practices for the program's student learning outcomes.
- All Maui Community College Construction Academy positions funded by the State Legislature in 2006 were filled by qualified personnel:

	<u>FTE Position Allocated</u>	<u>FTE Position Filled</u>
Home-based Instructors	4	4
Traveling teacher	1	1
Clerical	1	1
Counselor	1	1

Since August 2008, two experienced Construction Academy teachers have been hired in full time tenure track Sustainable Construction Technology instructor positions at Maui CC. This has created an especially close working relationship between the faculty who teach at the high schools and those who teach at the college, thereby benefiting both the programs and the students.

Even though three of the high schools are located far from the main Maui CC Kahului campus and must be reached by plane (Molokai), boat (Lanai), or a long automobile trip over a winding road (Hana), all of these programs are thriving. Classes are designed to meet the needs of the individual communities, and all are taught according to the professional standards in the articulation agreement.

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Maui County High School 2009-10 Registration in Construction Academy programs:

	TIU 5800 B&C 1	TIU 5810 B&C 2	TIN 5310 Drafting	Females (B&C)	Females (Drafting)	Special Education
Baldwin	68	22	28	4	0	8
Hana	8	5	0	0	0	4
King Kekaulike	18	15	21	5	7	7
Lahainaluna	10	15	67	1	20	11
Lanai	17	14	6	2	0	14
Maui	32	22	0	5	0	6
Molokai	10	3	1	1	0	6
Totals	163	96	123	18	27	56
Total CA students	382					

KAUAI COMMUNITY COLLEGE

Participation:

The student enrollment for the 3 high schools on Kauai totals 108 students and all students in the program are seeking college credit in the Building and Construction 1 course as well as the Building and Construction 2 course.

Kapaa High School enrollment in Construction Academy classes has leveled out this year, from a total enrollment of 50 students last year to a total enrollment of 42 students this year. We have the 42 students in two classes of Building and Construction 2.

Kaua'i High School has decreased their total enrollment from 35 students last year to a total enrollment of 16 students. We have these students in one Building and Construction 2 class. This enrollment decrease is due to the high school losing their Industrial Arts teacher to an accident, and the high school struggling with budgets to steer students into the program.

Waimea High School enrollment has leveled out this year due to graduation and a high number of seniors in the program. This year we have 50 students total in the program. In a Building and Construction 1 class this year we have 27 students, and five of these are women. In the Building and Construction 2 class this year we have 23 students enrolled and in this class we have three women.

Equipment:

The equipment to the schools has been redistributed and has been completed along with an evaluation of the condition of the equipment after completing our second year. The equipment maintenance program that we have imbedded in the construction academy program is working well, as we have had only minor issues with a limited number of tools in regards to safety and performance. The continuing process of acquiring the additional equipment to suit the needs of the individual high schools, along with meeting our new revised curriculum, and maintaining a safe work environment is still an ongoing challenge. Materials and equipment are being ordered and staged at KCC, and we are distributing them as needed to each school. Our training for the DOE Industrial Arts teachers from the three schools at KCC along with conducting general coordination and

informational meetings, is proceeding, only at this time due to budget issues has presented some additional challenges.

Our purchases made to provide courses on AutoCAD last year has allowed us to offer to the high schools an additional means for the students to gain college credit as well as prepare for careers in Architectural, Engineering, and Construction fields. We brought in an additional instructor, at 60% of full time. His role is to provide the students with the skills in blueprint reading and computer aided design. In addition, this allows us to offer at each high school courses that offer dual credit. We are currently working with the high schools to formally start this program in the fall of 2010. We have been introducing some of these skills within the Building and Construction 1 and Building and Construction 2 courses and believe that this will allow for all courses to focus on the main objectives of each.

Special Projects:

Last year, working with the Kauai Marines Veterans Association and in conjunction with the DARE and GREAT programs, the Construction Academy program assisted the students at the high schools to meet their community service obligations. The students had built benches and tables using donated materials that the high school seniors prepared for the middle school students to do the final assembly within their limits of skills, abilities, and acceptable tasks. The students on their own time came to Kauai Community College and under the supervision of the Construction Academy instructors worked on this project and turned over the completed projects to the middle school students.

We are continuing a strong relationship with the local Carpenters Union. We are setting up community service projects that involve students from each high school working alongside members of the Carpenters Union. This provides the students an opportunity to talk, interact and experience actual job site processes with the carpenters working in the industry.

The students at each high school are involved in campus projects at each high school that will be built by the students, and allow for a sharing of resources at the high school level. Plans to involve various programs at the high schools are underway, and will offer a larger learning experience. The students are involved with the design, location, and construction of the projects. This exposes the

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students to the complete construction process, involving them and becoming more than only a class project.