UNIVERSITY OF HAWAI'I SYSTEM ANNUAL REPORT



REPORT TO THE 2013 LEGISLATURE

Annual Report on The Construction Academy Curriculum

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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

From servicing over 200 students at 8 pilot schools during the 2005–2006 school year, the Construction Academy had grown to a capacity of over 2000 students in 35 high schools statewide, in academic year 2010-11. However, due to very low matriculation of students to Maui College and budgetary factors, Maui College has decided to discontinue the Construction Academy program. In spite of the reduced participation of 9 Maui High Schools, total student participation is 1,613 at 26 high schools statewide. Partnerships between the remaining College campuses and the local high schools remain strong. Matriculation to local Community Colleges is strong. Over half of the students in Hawai'i Community College's first year carpentry students are Construction Academy participants. Of the 419 seniors serviced by the Honolulu Community College's Construction Academy program, 196 (46.8%) were admitted to a University of Hawai'i (UH) System campus after graduating high school; 41.3% of those students were admitted to Honolulu Community College. At Kaua'i Community College, 48 participating students have stated their choice to attend Kaua'i Community College to further their education.

Participating High Schools

Hawai'i Community College		Honolulu (Community College	Kaua'i Community College
Hilo	Konawaena	Campbell	McKinley	Kapaʻa
Kaʻū	Laupahoehoe	Farrington	Nānākuli	Kauaʻi
Keaʻau	Pahoa	Kaimuki	Pearl City	Waimea
Kealakehe	Waiakea	Kahuku	Radford	
Kohala		Kapolei	Roosevelt	
		Leilehua	Wai'anae	
		Mililani	Waipahu	

The statewide implementation of the Construction Academy model continues to strengthen their partnership with the high schools and community. Remaining flexible to the individual needs of each high school and its surrounding communities remains an essential element of implementation. All three community colleges agreed to continue with the current agreement. 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 Hawai'i 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 the 2007 to 2009 academic years severely 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 ongoing slump in the construction industry, enrollments in the 2012 academic year (3809) did again decrease from the previous year (4270). However, enrollment levels still remain beyond those in pre-Construction Initiative years. For example, in the 2001 to 2003 academic years that preceded the funding of the Construction Initiative, there was an average of approximately 3140 apprentices enrolled each year which is 669 fewer than in the 2012 academic year.

The Assistant Registrar who was hired in Fall 2008 and whose primary responsibility is record keeping for the apprenticeship program continued to provide much needed assistance with attendance records, grades and in generating reports such as cumulative earned hours that are used by apprenticeship coordinators to track their students. She also helped with registration and the resolution of problems that arose in this process. For example, she addressed problems that were encountered by apprentices who paid their tuition online via the MyUH Portal (which the College encourages) by alerting the Business Office of the need to redirect payments which were made in the wrong term and by providing apprentices with instruction on navigating within the Portal site. Additionally, she took on the responsibility of directly servicing our many apprenticeship training affiliates in matters related to registration, student records and special requests for data. Finally, she continued to fine tune the process and schedule for disenrolling apprentices for non-payment of tuition and the result has been more accurate class rosters and the elimination of unnecessary charges or financial obligations for students. 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 160 instructors. During the past academic year, wages for approximately 21,340 instructor hours (580 apprenticeship classes) were paid with these funds. Maui Community College also received an allotment for lectureship with which they paid wages for approximately 2160 instructor hours (27 apprenticeship classes). The other campuses did not receive allocations for lectureship so instructors' payroll had to be funded from other sources.

Despite the downward trend in the last few years, as compared to a decade ago, apprenticeship enrollments remained elevated at the College this past year and are expected to remain at about these levels in the current academic year. At this point in the Fall 2012 semester, with several weeks still remaining in the term, enrollment is already beyond 1,700. Some programs register students in short-term classes through mid-December so the student count will increase over the next few weeks. In Spring 2013, the College may even experience a modest increase in apprenticeship enrollments because there have been indications of a resurgence in the building industry (as reported by different training programs), several trade apprenticeship programs are planning to conduct recruitments shortly, the College and Workforce Development Office have received requests from several employers for assistance with creating their own programs and the Associated Builders and Contractors may move ahead with expanding their recently resurrected Roofers program.

Due to the almost unprecedented numbers of apprentices on the campuses in recent years, shop equipment was over taxed and materials and supplies depleted. The Colleges continued to use their operating/supplies budgets to replace old equipment and tools, purchase new types of equipment and replenish shop supplies and materials. This annual funding enabled the Colleges to gradually 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, Perry Scaffolds were bought

for the acoustic ceiling classes to help extend their hands-on training to ceilings of true (actual) heights, safety and how-to DVDs were purchased for use by all trades to supplement their training and safety programs, CPUs and monitors in the Apprenticeship Computer Lab were updated to enable the loading and optimal utilization of the latest version of AutoCAD and a number of power tools were bought to replace old, overused ones. Funds from the budget were also 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 continued funding, the University of Hawai'i 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 continue to be able to more completely meet the training needs of the construction industry.

APPENDIX

HAWAI'I COMMUNITY COLLEGE

School Year	10-11	11-12
Participating High Schools	9	9
Building & Construction 1	229	246
Building & Construction 2	81	89
Mechanical Drawing	n/a	0
Drafting Technology 1	43	47
Electricity and Electronics		0
Total	353	382

Participating high schools include Hilo, Ka'ū, Kea'au, Kealakehe, Kohala, Konawaena, Laupahoehoe, Pahoa, and Waiakea High Schools.

Construction Academy classes on the island of Hawai'i are offered at nine high schools on the island. Enrollment increases occurred in each of the areas taught by the program, resulting in an overall increase of 9%. Graduates of the Construction Academy articulate to the UHCC Community College system and apprenticeship programs, fulfilling the vision of the program. Construction Academy alumni are enrolled in a variety of programs at the college. In fact, for the 2011-12 academic year, 8 of the 15 students enrolled in Hawai'i Community College's first year carpentry program are graduates of the Construction Academy.

Safety, math, and construction terminology continue to be priorities of the program. Construction Academy personnel have articulated student learning outcomes and assessments with the Carpentry program at Hawai'i Community College. The Academy held its fourth annual Safety-First Hand Tools Face-Off in May 2011, 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 framing, nailing, and measurement calculations. A competition solely for drafting technology students was held concurrently. Participants at the daylong event represented 8 of the 9 high schools with Construction Academy programs.

The Construction Academy has home-based instructors in nine high schools. The Academy has 6.5 FTE instructors in non-tenure track positions and 3.0 FTE casual hires. The casual hires are filling positions at Hilo High, Kohala High and also serve as traveling instructors. Anticipating a switch in the Hilo High Construction Academy program from Hilo High to Hilo High Alternative School aka Lanakila Learning Center in the next academic year, we elected to utilize a qualified individual as casual hire instead of hiring a non-tenure track instructor. In anticipation of expanding offerings at Kohala High to include Design Technology and offer a Construction Academy program at Honoka'a High starting fall 2012, we similarly elected to utilize a qualified individual as a casual hire, waiting until the next academic year to hire a non-tenure track instructor for Kohala High.

The Construction Academy currently has 3 vacant positions. When the program started in 2006, one position was used to hire a coordinator. The individual filling this position retired June 2009, returning as a .5 casual hire fall 2009. Starting spring 2010, a decision was made to not fill the position in an effort to cover budget reductions. The Construction Academy's clerical position became vacant fall 2010 when the incumbent accepted a temporary reassignment to gain experience in a higher level position. The clerical position has not been filled since the incumbent has return rights; plus the vacancy makes additional funds available for instructional salaries. At the end of the 2011-12 academic year, another vacancy occurred that has yet to be filled. These 3 positions make up the difference between the Academy's 9.5 allocated positions and the 6.5 instructors filling nontenure track positions.

	FTE Position	FTE Position	FTE Position Filled
	Original Allocation	Current Allocation	
Home-Based Instructors (.5 position	7	6.5	6.5 FTE/2 Casual
reallocated within the College 2010-			
11)			
Traveling Instructors	2	2	1.0 FTE Casual
Counselor (1.0 position reallocated	1		n/a
within the College 2011-12)			
Clerical	1	1	Temporary Vacancy
Total	11	9.5	9.5

APPENDIX

The Construction Academy program has been well-received by Hawai'i Island high schools since its inception. Hawai'i Community College continues to foster these relationships and build new ones. The slowdown in construction experienced over the last several years has not slowed down the program's efforts. Construction Academy personnel continue to recruit students and expand offerings, promoting the idea that the skills learned through the Academy will benefit students throughout their life, regardless of their career choice. Our Construction Academy faculty are valued members of the high schools where they teach. As instructors they provide high quality educational experiences, promoting skill development in both technical and academic areas. As community college faculty, they introduce post-secondary education to individuals who might otherwise never consider going to college. They provide school and community service. They share their construction expertise, assisting with special projects when appropriate. They make the schools they serve a better place. They change lives for the better.

HONOLULU COMMUNITY COLLEGE

Introduction

As the Honolulu Community College (Honolulu CC) Construction Academy steered into the 2011-2012 academic school year, the program concentrated on providing the same (or improved) levels of service while being conscious of the available resources. To do this, the program restructured its course offerings and refocused its efforts on schools that have been receptive to the evolving needs of the Academy.

Scope of Service for the 2011–2012 School Year

For the 2011–2012 school year, the Honolulu CC Construction Academy offered three Department of Education courses at 14 O'ahu high schools—Campbell, Farrington, Kahuku, Kaimuki, Kapolei, Leilehua, McKinley, Mililani, Nānākuli, Pearl City, Radford, Roosevelt, Wai'anae, and Waipahu.

Out of the 1,031 students that were serviced, 63.5% of the students were enrolled in Building & Construction Technology 1; 24.8% in Building & Construction Technology 2; and 11.6% in Design Technology 1 (*Table 1*).

Table 1. Course Enrollment—Number of Students Serviced by Course

Course Name	Student Count	0/0
Building & Construction Technology 1	655	63.5%
Building & Construction Technology 2	256	24.8%
Design Technology 1	120	11.6%
TOTAL	1031	99.9%

The program had a gender demographic of 90.4% males and 9.6% females (*Table 2*).

Table 2. Student Demographics—Gender

Gender	Student Count	0/0
Male	932	90.4%
Female	99	9.6%
TOTAL	1031	100.0%

Matriculation of Students into the UH System

Nearly three quarters (76.2%) of the students serviced were juniors and seniors (*Table 3*).

Table 3. Student Demographics—Gender

Grade Level	Student Count	%
9	60	5.8%
10	185	17.9%
11	367	35.6%
12	419	40.6%
TOTAL	1031	99.9%

Of the 419 seniors serviced by the Academy, 196 (46.8%) were admitted to a University of Hawai'i (UH) System campus after graduating high school; 41.3% of those students were admitted to Honolulu CC (*Table 4*).

<u>Table 4. Matriculation of CNAC Students into the UH System</u>
Number of Students Who Matriculated into the UH System by Campus*

UH Campus	Student Count	%
Hawai'i CC	1	0.5%
Honolulu CC	81	41.3%
Kapiʻolani CC	38	19.4%
Leeward CC	39	19.9%
UH M ā noa	22	11.2%
UH Hilo	2	1.0%
UH West Oʻahu	4	2.0%
Windward CC	9	4.6%
TOTAL	196	99.9%

^{*}Students who matriculated into the UH System were defined as seniors who were admitted into a UH Campus after graduating high school (Summer 2012, Fall 2012, or Spring 2013).

One hundred ninety-one students identified a field of study (five students are currently *unclassified* or *undeclared*) among 40 majors (*Table 5*). Of these 191 students, 52 (26.5%) chose to major in a construction-related field.

Table 5. Matriculation of CNAC Students into the UH System

Number of Students Who Matriculated into the UH System by Major*

Student Majors	Student Count	0/0
Accounting	1	0.5%
Administration of Justice	2	1.0%
Aeronautics Maintenance Technology	2	1.0%
Agriculture	1	0.5%
Apprenticeship	3	1.5%
Architectural, Engineering, & CAD Technologies	4	2.0%
Architecture	2	1.0%
Automotive Technology	13	6.6%
Business Administration / Pre-Business	3	1.5%
Carpentry Technology	12	6.1%
Civil Engineering	2	1.0%
Commercial Aviation	2	1.0%
Computer Engineering	1	0.5%
Computer Science	1	0.5%
Construction Management	1	0.5%
Culinary Arts	8	4.1%
Digital Media Production	2	1.0%
Electrical Engineering	3	1.5%
Electrical Installation & Maintenance Technology	4	2.0%
Fashion Technology	1	0.5%
Fire & Environmental Emergency Response	1	0.5%
General Arts & Sciences	2	1.0%
General Undeclared	3	1.5%
Hawaiian Studies	1	0.5%
Health Care Administration	1	0.5%
Information Computer Sciences	2	1.0%
Information Technology	1	0.5%
Liberal Arts	83	42.3%
Marine Science	1	0.5%
Mechanical Engineering	3	1.5%
Music & Entertainment Learning Experience	2	1.0%
Music	1	0.5%
Natural Sciences	2	1.0%
Paralegal	2	1.0%
Pre-Engineering	5	2.6%
Programming	1	0.5%
Refrigeration & Air Conditioning Technology	4	2.0%
Sheet Metal & Plastics Technology	3	1.5%
Television Production	1	0.5%
Unclassified	2	1.0%
Web Support	1	0.5%
Welding Technology	6	3.1%
TOTAL	196	99.30%
*C+-1+		

*Students who matriculated into the UH System were defined as seniors who were admitted to a UH Campus after graduating from high school (Summer 2012, Fall 2012, or Spring 2013).

Construction-Related Majors

Table 6 lists the degrees and certificates sought by the students who matriculated into the UH System. Of 196 students, 6.1% are pursuing *certificates*, 77.0% for *associate's* degrees, 13.3% for *bachelor's* degrees, and 1.0% for *doctorate* degrees.

<u>Table 6. Matriculation of CNAC Students into the UH System</u>
Number of Students Who Matriculated into the UH System by Degree & Certificate Sought*

Degree/Certificate	Student Count	0/0
Associate of Arts	83	42.3%
Associate in Applied Science	43	21.9%
Associate in Science	25	12.8%
Bachelor of Arts	13	6.6%
Bachelor of Music	1	0.5%
Bachelor of Science	12	6.1%
Certificate of Achievement	8	4.1%
Certificate of Completion	3	1.5%
Certificate of Competence	1	0.5%
Doctorate of Architecture	2	1.0%
Non-Degree	5	2.6%
TOTAL	196	99.9%

Summer Program 2012

The Honolulu CC Construction Academy held its 2012 Summer Program from June 4, 2012 through July 6, 2012. The Summer Program engages high school students, who will be entering grades 10–12 and recent 2012 graduates, in activities that will help strengthen their math skills through a construction-based learning environment.

Students participating in the Summer Program for the first-time were admitted to Honolulu CC and registered in a three credit course, *IEDB 20—Introduction to Building & Construction*, where they were exposed to four trades (architectural, engineering, and CAD technologies, carpentry, sheet metal, and welding); Former Summer Program students were enrolled in *Advanced Carpentry and Welding* where they learned advanced carpentry and welding techniques that were not previously covered in *IEDB 20* while engaging in real-life projects such as erecting and completing the finish work for an interior wall.

This summer, 50 students (79.4%) were enrolled in *IEDB 20*; and 13 (20.6%) in *Advanced Carpentry and Welding*.

Honolulu CC faculty who specialize in each trade facilitated content area instruction. Where available, Honolulu CC faculty who regularly teach on campus were utilized as the content area instructors. This proved to be advantageous for both the program faculty and the students because: 1) they were able to develop instructor-student relationships; 2) students learned about the program from the actual (Honolulu CC) program instructor; and 3) the program faculty were able to personally promote their programs and trades to a captured audience.

For five weeks, *IEDB 20* students spent approximately one week learning about each trade. To help students develop an identity with fellow students and faculty, students were grouped into cohorts and assigned to a Honolulu CC instructor who served as their "mentor" throughout the course of the program.

Each of the 2012 high school graduates also met individually with a counselor who helped them take the next step in making their post-high career or educational goals a reality.

The objectives of the Honolulu CC Construction Academy Summer Program are to:

- 1. **Engage Student Learning:** Offer students a learning opportunity where they can experience applied instruction in various construction-related fields.
- 2. **Build Relationships:** Develop relationships with participants to aid in the matriculation of students into the UH System, particularly Honolulu CC.
- 3. Offer Professional Development Opportunities: Due to the distribution of instructors at various high schools on Oʻahu and the variance in school schedules, it is difficult to offer professional development opportunities during the school year to Honolulu CC Construction Academy instructors. Through this summer program, "mentor" instructors rotate through each trade along with their assigned cohort. This allows them to refresh their knowledge about each trade, learn about the program offerings at Honolulu CC, and observe various instructional styles or ways of presenting curriculum all while servicing the summer program participants.

The 2012 Summer Program afforded 63 high school students from various public, charter school, and private high schools on O'ahu the opportunity to learn about the construction industry. Of these students, 30 (47.6%) were 2012 high school graduates; 9 students (14.3%) were female; 21 students (33.3%) were of Native Hawaiian descent.

Eighty-three percent (25 students) of the program participants who recently graduated in 2012 were admitted into the University of Hawai'i System during the Fall 2012 semester; of the students who matriculated into the University of Hawai'i System, 67% (20 students) were admitted to Honolulu CC.

KAUA'I COMMUNITY COLLEGE

Participation:

The current student enrollment for the high schools on Kaua'i totals 200 students. In the Building and Construction courses the total number of students is 151 and 86 students are seeking the college credit offered as they have indicated that they will be seeking college enrollment. In the Blueprint Reading and the Technical Drawing courses we have 49 students and 38 have stated that they will be seeking the college credit offered as they have indicated that they will be seeking college enrollment. In addition, out of the number of students indicating their plans for college, 48 have stated their choice to be Kaua'i Community College. There are a total of 19 females in our programs; 6 at Waimea High School and 13 at Kapa'a High School.

Kapa'a High School enrollment in Construction Academy classes has increased mainly due to the new Drafting Technology 1 course involving blueprint reading and introduction to AutoCAD. There are two classes of Building and Construction -1.

KAPA'A HIGH SCHOOL		
COURSE	STUDENTS	
BUILDING & CONSTRUCTION - 1	51	
BUILDING & CONSTRUCTION - 2	36	
DESIGN TECH 1	43	
TOTAL STUDENTS	130	

Kaua'i High School continues with involvement in the program, new faculty at the high school this year. We are working with the new teacher, assisting him with understanding our curriculum, and providing both guidance and materials for his two classes in both Building and Construction - 1, a class of 23 students, and a class in Building and Construction - 2, a class of 13. In addition, the teacher is attending our training on our complete curriculum to provide for an expanded course offering in the future, including Building and Construction -2 and Design Tech -1 courses.

KAUA'I HIGH SCHOOL		
COURSE	STUDENTS	
BUILDING & CONSTRUCTION - 1	23	
BUILDING & CONSTRUCTION - 2	13	
TOTAL STUDENTS	36	

Waimea High School enrollment has some decrease this year, however the school remains supportive as they struggle with budget restrictions. We are offering two different courses now that provide a path to KCC dual credit.

WAIMEA HIGH SCHOOL		
COURSE	STUDENTS	
BUILDING & CONSTRUCTION - 1	22	
BUILDING & CONSTRUCTION - 2	6	
DESIGN TECH 1	6	
TOTAL STUDENTS	34	

Equipment:

The equipment to the schools has been distributed and has been completed along with an evaluation of the condition of the equipment after completing our fourth year. The equipment maintenance program that we have imbedded in the construction academy program is working satisfactory; we have had to replace some hand tools as well as a small amount of power tools to maintain our standards in regards to safety and performance. The acquisition of some additional equipment to minimize risk in working with the students has allowed us to broaden the scope of our curriculum. Maintaining a safe work environment is still an ongoing challenge. In the Building and Construction classes we are challenged with the class sizes of the high schools. 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 schools at KCC along with conducting general

coordination and informational meetings is proceeding, although due to budget issues, challenges in this area are ongoing.

The introduction of AutoCAD, along with a portable computer lab, has allowed us to enhance all of our classes at the high schools in providing an additional resource and tool for the students to work with. We are currently offering three classes of Design Tech-1 at Waimea and Kapa'a High Schools. We are looking to implement these courses at Kaua'i High School.

Special Projects:

Over the past year we have brought to the Building & Construction classes a culminating project of a building that the students build. This year in cooperation with the Division of Wildlife we have a project involving all three schools. The project is constructing Kiosks to be used at various locations on the island as information stations for visitors. The students in the Design Tech courses offered several different designs to the Division of Wildlife and once one was selected, the students generated material lists and are in the early stages of cutting the various materials to length. Next semester the students will be involved with the construction, site preparation, and setting of the Kiosks at their locations.

Our ongoing building project remains as new classes are involved with additions, alterations, and maintenance of the buildings. The Design Tech course has been involved with the project as well, providing design and construction drawings for the modifications the students want to incorporate into the project. In addition, the project provides an opportunity to invite community members involved in the construction industry to offer comments and criticism. This project also offers an opportunity to expose the students to the new building codes as well as green and sustainable building methods that are introduced where appropriate.

The Construction Academy program continues to provide assistance to the students at the high schools to meet their community service obligations. In addition we work with the Boy Scouts providing mentoring and guidance as the Scouts attain a variety of badges in building and construction related areas.

We are continuing a strong relationship with the local Carpenters Union. They have been a tremendous supporter of our program, providing school visits to offer a walk-through of the

APPENDIX

students' work, and constructive criticism to the students. The students are required to maintain and record their work and progress in a portfolio. The representatives have let the students know the value of this and guided the students to hold on to that, as it is a resume of their ability. These visits provide the students an opportunity to talk, interact and experience actual job site processes with the carpenters working in the industry. This year we received several requests from the local carpenters union for a recommendation for some of our students to enter into the apprenticeship program, to date we have three of our former students involved with the Carpenters Apprenticeship program, we are receiving excellent comments back on their performance.