El Camino College CAREER AND TECHNICAL EDUCATION — 2013 SUPPLEMENTAL QUESTIONS Completed by Steve Cocca

Electronics and Computer Hardware Technology (ECHT)

Use labor market data, advisory committee input, and institutional data to respond to the following questions:

1. How strong is the occupational demand for the program?

There is still a very strong demand for this program.* The service area is becoming increasingly active in the following areas:

- 1. Computer & Electronic Product Manufacturing
- 2. Electronic Instrument Manufacturing
- 3. Electrical Equipment & Appliance Manufacturing
- 4. Electrical & Electronic Goods Merchandise Wholesalers
- 5. Aerospace Product & Parts Manufacturing

*Los Angeles Long Beach Glendale MD (Los Angeles County) Industry Employment & Labor Force - by Annual Average, March 2012 Benchmark

2. How has the demand changed in the past 5 years and what is the outlook for the next 5 years?

After recovering from the greatest economic downturn since the Great Depression, most of our classes are filling to or above capacity. Many of our local employers want their workforce to be highly educated to stay competitive. We are seeing students who are:

- 1. Trying to obtain an AS Degree to maintain their employment status,
- 2. Taking courses to "refresh" their knowledge base to move into higher, more challenging electronic engineering technology areas,
- 3. Transferring to a four year in or out of state university education.

3. What is the district's need for the program?

Over the past years, the program has proved its relevance to "the integration and implementation of STEM" related community outreach programs. The Electronics and Computer Hardware Technology Program compliments many new and existing campus-wide instructional programs.

4. What is the state's need for the program?

The state is trying to rebuild its technological capacity. To do this, educational resources must be made available to ensure our competitiveness. The Electronic and Computer Hardware Technology is one of the last such community college

programs still active. We provide our customers with high level of electronics training at an economical cost. Our service areas have already seen the problems with the "for-pay" schools. Our students come here to not only receive a good electronics education, but more importantly, those critical thinking skills necessary to keep those very technical, good tax generating jobs here in California.

5. How does the program address needs that are not met by similar programs in the region?

The Electronic and Computer Hardware Technology Program, at El Camino, is <u>the</u> <u>only full service program in the area</u>, west of the 57 Freeway. Because of this situation, we have students enroll in our ECHT courses, whose home districts are in: Santa Monica, LACC, Cerritos, Long Beach City, North Orange County Community College District, and as far as Rio Hondo College.

6. Are the students satisfied with their preparation for employment?

The majority of our students are satisfied with training they have received. Over the past three years, we received a grant form Southern California Edison to purchase new, "state-of-the-art" test equipment. We tried to purchase equipment that our students use every day on the job. By giving time to experiment, and very instructional lectures, many of these students have become very proficient in their job classifications.

7. Are the employers in the field satisfied with the level of preparation of our graduates?

Our local employers are pleased with El Camino's ECHT Program and are interested in helping build a pool for potential employees. There are two things I picked up in interviewing a number of local employers from another project that I have been working on. I asked, "What makes a community college student graduate more attractive to employ, over others similarly qualified?" The responses were quite interesting.

- 1. ECHT students usually take other courses outside their discipline. These students bring in a higher inventory of skill sets that can be utilized in other areas, than those who have been trained at a for-pay school.
- 2. ECHT students are quick learners,
- 3. Some ECHT graduates have become production line middle managers, and
- 4. Since I am a graduate of the electronics program, I respect the reputation and quality of the program.

8. What are the completion, success, and employment rates for the students?

We need to work on or completion rates! But, because of the nature of the beast, the ECHT Program being a technical training area, completion and success are

subjective. I survey my students to find out why they are here? I get responses: Get a degree, Skills upgrade, transfer, exploring options, or obtaining skills for work preparation. A student may feel that he/she is highly successful by completing one of the above options without completing a degree or a certificate. But by Institutional Research criteria, they are labeled as class/program non-completer. There is a term in law, "Primi Faci", (first look)—the system must reorient itself to become "**student oriented" not "numbers oriented**".

As to employment issues, employers come on campus to recruit. We can bring our students close to the water, but we can't make them drink! Those who want to work in electronics will work!

9. What is the role of the advisory committee and what impact does it have on the program?

The Advisory Committee is our mirror. They tell us how well we are doing, what we need to improve, and what direction we need to go forward.

10. If there is a licensure exam for students to work in their field of study, please list the exam and the pass rate. If there are multiple licensure exams in the program, include them all.

In the computer repair option, many students take the COMPTIA Certification exams for A+, Net+, and Security+.

For those students who take the independently administrated exam, Pass Rates are:

- 1. $A^+ \ge 90\%$
- 2. Net⁺ ≥ 65%
- 3. Security⁺ $\ge 65\%$