Solano Community College Drafting Department Advisory Committee Meeting April 20, 2016

Attendees:

Karen Cook SCC Drafting Program Coordinator,

Ben Pochop Instructor Buckingham Charter High School Vacaville Brad Foulk Civil Engineer/Surveyor; Company: Foulk Assoc.

Nate Collins Instructor Will C. Wood High School

Frank Lucido Engineer, Napa County

Colby Risso HVAC drafter, Blue Mountain, Vacaville

Chris Miller Paton Group Inc.

Anthony Gutierrez PM Design Architectural Drafting, Instructor SCC Architecture

Cedric Brooks PM Design Architectural Drafting

Cindy Jourgensen Owner Kingdom Design; Instructor SCC Drafting

Debra Berrett Work Experience Coordinator, SCC

A. Welcome & Introductions

Karen welcomed the group stressing the importance having an advisory committee that reflects the needs of community business that hire drafters, students seeking a career in drafting, and Solano Community college's drafting program.

Everyone introduced themselves.

B. Announcement/Information on August 12th CTE Community Round Table

Karen presented the purpose for the CTE Community Round Table and encouraged all to attend

C. Breakout sessions- drafting

D. Brief summary of recent changes

New 12 unit job direct certificate program was described to the group by Karen

Drafting department is getting new 3D printer

New high school based college drafting courses being offered at Buckingham Charter High School

3D printer course is being planned in the form of a boot camp

Nate suggested it be held late in the day so his 25 students can attend

Karen asked if anyone had been to or knew of a Maker Lab and if the group thought it was something that students and the community would be interested in. The group agreed this would appeal to a wide range of people.

E. Updates

Curriculum review summary

Frank brought up the question of whether the Materials class is really necessary Several questions were raised about what is covered in the Vocational math course Brad suggested that the concept of reading directional coordinates be covered

Collaboration with high schools update.

New faculty recently added Anthony Gutierrez.

F. Industry Professionals Input/Discussion

Invited industry professionals outlining local industry trends, needs and Industry hiring needs/trends/outlook.

- Frank expressed his opinion that Revit is needed more in local industry. Anthony and Cedric concurred. Frank said that Napa was just awarded \$200 million in new projects. Will increase need for drafters who have completed the drafting program and can use CAD on these new projects. Frank uses SolidWorks for his projects.
- Colby said that at Blue Mountain they just hired several new employees. They use ACAD 2D for their plumbing, electrical, and mechanical drawings. He emphasized the need for drafters that can use ACAD.
- Brad used ACAD in his business. There has been an increase in need for civil drafters who have completed the program and have good geometry and trigonometry math skills. He is also seeing more Revit being used especially in architectural files sent to him.
- Cedric works with ACAD 2D in commercial designs for restaurant industry but sees a trend towards the use of Revit. Also said that students need to be more flexible and open to learning new ways of doing things once they move into the employment sector.
- Anthony agreed that students need to be receptive to new ways of doing things and quick to pick up new skills. Students need to know more about interior design as it relates to architecture.
- Cindy shared about her contract work doing mechanical project using SolidWorks. She sees more jobs being posted for local business in the job boards. Also sees increased need for Revit training
- Nate said his focus in the program at Will C Wood is in manufacturing processes. Students are very interested in the connection between CAD and CAM in industry. He is very interested in involving students in using a 3D printer which simulates the use of a CNC machine.
- Ben uses ACAD Inventor and is now introducing the SolidWorks program into his robotics classes. Chris gave an update on what he is seeing in 3D printing area of industry.
 - He stated the technology is advancing guickly and more industries involved.

G. Curriculum review

The group reviewed the current curriculum and the program brochures.

For the Surveying technology program, Frank suggested that more geometry and trig be included in preparation for the Survey class. Several comments about the importance of including the GIS class in the program. Survey skills still an important and needed job focus for Solano County.

For the Drafting Technician program, there was a discussion around the need for materials class. It was suggested that this course could be an elective and that a new Revit class be offered to those students in the drafting program. Colby suggested that students need to know more about HVAC and the symbols used on the mechanical drawings for HVAC. Frank pointed out that Revit can be used to show both plumbing and HVAC so the problems with routing pipes and HVAC ducting can be avoided. Colby offered that with Revit the transitions from floor to floor would be designed ahead of time instead of what is done now; HVAC is installed working around the already installed plumbing. This causes remodeling costs when closet spaces are used to run ducting.

The question was brought up should the Revit program be taught as a separate course or included in the architectural course. Cindy, who teaches a combined course of Architecture and Revit at another school, offered that teaching the combination of these 2 major concepts left students feeling

overwhelmed with the amount of information and projects required in the couse. She suggested that the students learn Architectural theory using ACAD 2D and then use that floor plan to create a 3D model in Revit. Concepts of BIM would also be included in the Revit course.

In this discussion, it was proposed a new 12 unit mini certification be developed for the architectural discipline which include ACAD, Arch 1, and Revit, plus one additional course. All agreed this would be beneficial for our students.

H. Introduction and discussion of new ideas and possibilities

A short discussion regarding articulation and collaboration between the high schools explored how students from Wil C Wood can take advantage of the DR 45 and DR 58 courses being offered at Buckingham and the Buckingham students going to Will C Wood campus for robotics workshops. Nate said the articulation agreement is allowing his students to get college credit is a positive addition to the program at Will C Wood.

G. Miscellaneous items

Frank suggested that the students need to learn how to import data points from the civil surveys into ACAD. He also asked if Civil 3D ACAD was taught. The instructor who teaches this course is not at the advisory committee meeting but he will be advised of this suggestion.

Colby stated it is very important that students know programs other than CAD; MS office products- Word and Excel.

Karen stated that some of the normal advisors were unable to attend this year because of last minute business commitments but she contacted on the phone to keep them up to date with department news. She will contact them again for future meetings.