

Administrative Response
CAD/Drafting Program Review
April 15th, 2011

We thank you for your tireless dedication to your profession, students and the community as you've created, maintained and improved the outstanding quality of The CAD/Drafting Certificate Program.

Also, we thank you for a thoughtful, well organized review addressing all of the items noted in the Program Review guidelines. Your presentations were also thoughtful, thorough and well organized.

This response contains 4 sections: 1) Commendations, 2) suggestions/observations, 3) response to recommendations/areas of SAC needs and 4) Closing comments.

Commendations

- *Your work to align your CCOG's with ANSI Standards
- *Keeping up-to-date with new versions of CAD software
- *Investment in 'cross training' for full and part time faculty for CAD
- *The incorporation of Rhino, Google, Autodesk Maya and 3D Studio Max
- *Your consideration of conducting annual classroom observations
- *Eight point classroom observation rubric
- *Aggressive plan/time lines to update all CCOGs
- *Use of 'real world' design projects
- *Assessment of 'College Core Outcomes': Communication, Critical Thinking and Problem Solving, Cultural Awareness, Professional Development, and Self Reflection
- *Use of Inquiry-Based Learning
- *Review of student demographics for CADD
- *Your strategies to facilitate access and diversity
- *Comprehensive listing of Professional Development activities
- *Your consideration of incorporating CAD certification testing
- *Your coordination with Disability Services
- *Mapping of CADD Certificate outcomes to PCC Core Outcomes
- *Coordination with PCC's Learning Assessment Council
- *Your comprehensive listing of strengths
- *Your continued flexibility regarding the logistics and changing time lines for moving your department to the SE Center.

*Your work with your Division Dean and AutoDesk to secure multi-year access to their CAD software at a reduced price.

*Collaboration with Machine Manufacturing Tech for the use of their Rapid Prototyping machine

*Your use of Survey Monkey to reach graduates.

*For your clear plan for assessing your certificate outcomes.

Suggestions/Observations

We concur with yourself identified need to improve your collection of job placement data and suggest you work with Laura Massey, Director Institutional Effectiveness to develop a plan designed to meet your needs.

We agree with and support your goal of incorporating more ‘Green Technology’ in your course offerings. We suggest, if you haven’t already, that you make contact with Todd Sanders, one of the three chairs of SPARC as they have developed and hopefully will continue to offer a workshop designed to help facilitate the introduction of green/sustainability content into course offerings.

Additionally, we support your interest in seeking grant funding and/or scholarships which would cover the cost of students taking the ‘certification test’.

As you mentioned, it could be worthwhile to explore various forms of ‘social media’ including blogging and twitter to better facilitate communication with program graduates.

In conjunction with your interests of offering Certification Testing for AutoDesk, we urge that either through your program or if appropriate through CLIMB, you consider the development of a 6-8 hour refresher course as a CEU.

As suggested by Craig Kolins, we urge that you explore ways your students may engage in educational opportunities, such as Co-op through the Bond. We suggest you work with George Knox as he has met with his colleagues from throughout the District and the Bond office on this very topic.

We understand the challenge created by the recent change in Perkins requirements which prohibit services to students in certificates of less than one year. Chris Chairsell will ask Jan Volinski to contact you to explore ways to continue providing these services to your students.

In Section 2C the citation of ‘Evidence’ regarding how students meet core outcomes describes how data was collected rather than whether or not the outcomes were met. We urge you to consider this when developing, delivering, analyzing and reporting on assessments in the future, as you begin to assess your certificate outcomes.

7. Recommendations for Improvement

A. Identify the strengths of your program.

Contained in your comprehensive listing of program strengths are a couple items which are suggestive of recommendations rather than reflections of current strengths. In those instances, an administrative responsive in italics immediately follows the item.

Advisory Board: Various professionals collaborating with college faculty in an effort to maintain a healthy, progressive program while implementing new ideas and strategies for growth.

Degree courses: High levels of enrollment in degree courses, as well as, large class sizes in other CADD offerings. See enrollment statistics for the past 3 years. Uniquely positioned as a 1-year certificate rather than a 2-year degree program. Addition of viable program offerings may lead to a more-than-1 year Certificate.

This is certainly worthy of further consideration and as you do so, we ask that you work with both your Sylvania Division Dean as well as the Division Dean from SE who ultimately will be working with your program.

Faculty distinctions: Mark Hagen and Glen Truman have dedicated over 20 years (each) as full time faculty, providing professional and academic support in the classroom and in the office as advisors. Part time faculty includes former students now employed professionally, including former full time faculty member Susan Hooper. Cross-trained in a number of CAD areas including AutoCAD, Inventor and SolidWorks.

ADDA Membership and participation: Continuous membership in the largest drafting-affiliated body in the world. CADD instruction is based on the current ANSI standards and practices for drafters. We offer ADDA certified testing at the Sylvania Campus.

High Schools / PAVTEC: Collaborate with local area high schools participating in dual credit programs.

We urge that you further explore working with AutoDesk to cover area high schools through your software license. Should this become a viable possibility, it would be reasonable to approach PAVTEC and request funding to help support an expanded site license.

Expansion to the SE Campus: Future intent is expressed by transitioning the CADD program to the SE Center campus. The program will see enhanced visibility by establishing a new CADD presence that is close to downtown Portland. The CADD program will be able to distinguish itself as a “stand alone” certificate that offers training apart from Architecture or Interior Design. Will help to fill the void left by the elimination of the drafting program at Clackamas Community College. We are the only one of its kind in the Portland metro area.

Software: The CADD program utilizes the most current and advanced software(s) available to the design community, including AutoCAD 2011, Inventor Professional 2011, and SolidWorks 2010. No other state sanctioned, academic program in the Portland metro area offers what we do. Full and Part time faculty are instructing said software in a manner commensurate with the demands of industry. Contrast that to what Clark College, Vancouver, WA is doing, as well as, Imaginit and Shounco. Remember, we teach students how to draft, with its related principles, not just how to use the software. We secured a perpetual license for the Autodesk Academic Suite of software during Summer 2010. We are also in the process of establishing an Autodesk Testing Center for AutoCAD software tests.

Your program, like many CTE programs, tends to be equipment, software and facilities intensive. As you explore the development of an Autodesk Testing Center, we urge that you take steps to set it up as a funding stream providing direct benefit to your program. To do so, however, you will need to make arrangements through the Finance Department to separately track revenue and deposit it in an account you can access. If this begins to become a reality, please work early with your Division Dean and the Finance Office as it is often easier to build a system fresh from the ground up rather than to tweak one which simply has evolved.

CADD Fair: A proposed CADD Fair at the Sylvania Campus will bring working professionals, vendors and educators together to share new concepts, ideas and techniques in the field of mechanical/manufacturing design. Roll out of Inventor Professional 2012 would be included in the Fair.

We support this suggestion and to the extent that funding will be needed to advertise and hold the Fair, we urge that you work with your Division Dean to secure one-time dollars through margin funds to support the project.

Job Prospects: Employment opportunities continue to rise for drafters and drafter designers in the area. Manufacturing “starts” and existing manufacturing sites for our region have shown slow, but steady, increases in hiring mechanical drafters. On the contrary, Architecture and related educational strands have seen sluggish activity for employment opportunities in their area. For the 2010-11 academic calendar, the CADD department has seen numerous, recent ARCH graduates seek alternate training in the CADD (manufacturing) area. This is one indicator

that employment prospects in architecture are experiencing a downturn due to so many graduates flooding the market. Confirmed by Kathleen Kuba, PCC Job Placement Specialist at Sylvania.

SAC Meetings: We (Glen and Mark) have regularly scheduled SAC meetings to discuss items such as Course content, Course outcomes, Course changes, New courses, Connections to industry and to the high schools, and collaboration with the Advisory Board. We have 2 District-wide SAC Days, as well.

Working with related PCC departments: Glen and Mark teach courses that are offered by different departments on the Sylvania Campus. Glen teaches structures and CAD for both Architecture and ID. Mark teaches engineering graphics for Engineering Technology. This adds strength to those respective departments by providing well-defined instruction from industry-experienced individuals. Glen is working with Machine Technology (Pat Kraft) on various assignments involving rapid-prototyping machinery and drafting schematics. Students have the opportunity of taking a virtual part (CADD) and creating that shape in the Machine Technology area. This provides a more realistic experience as they go from tape to shape.

Outcomes for CADD: We have completed a set of outcomes that are contemporary and applicable to the field of manufacturing and mechanical drafting. Those outcomes have been submitted to the college and have been approved by management. Outcomes are currently being shaped and revised to match the demands and expectations of the industries to which we serve. Classroom teaching materials, which includes tests and quizzes, are generated to meet the requirements set forth by the language of the outcomes.

Serving on Committees: Over the past few years, Glen and Mark have served on various committees that support the college's mission of excellence. Glen is currently participating in PCC Bond meetings on the both the Sylvania and SE Center campuses. Mark is currently serving on the Entrepreneurial Committee.

Scheduling: Mark collaborates with various programs to schedule class rooms for instruction. Programs include CADD, Arch, Engineering, Math, and Business Administration. The number of classrooms is 6 (six), with a total number of 25 computer workstations for each classroom.

Advising: A fair majority of student advising takes place within our office area in ST 208. With some assistance from Choul Wou, advisor for ARCH / ID / CADD, Glen and Mark provide comprehensive assistance to new and currently-enrolled students. Assistance takes the form of registering the students each term, providing advice on current trends in the labor market, writing letters of reference, and connecting students with the PCC Job Services area of the college.

B. Identify the areas in need of improvement.

*We commend you for your forthright declaration of areas in need of improvement.
We suggest that you prioritize this list, develop work plans and timelines, and*

create budgets where needed. In instances where funding is needed, please work with your Division Dean to secure margin dollars as many of these items could benefit through the use of additional one-time funding. Comments specific to individual items are included below.

Tracking graduates – Where do they go? Are they involved with CADD in some capacity?

We suggest you work with Laura Massey, Director Institutional Effectiveness, to review best practices regarding the tracking of graduates.

Learning new CAD software for both Full time and Part time faculty

We acknowledge the importance of learning/incorporating new CAD software as well as understand the complexities of doing so. To the extent that funding is needed, we suggest you pursue a combination of training dollars through Staff Development (<http://intranet.pcc.edu/resources/staff-dev/index.html>) and campus margin funds.

Working more closely with the SE Center Campus in regards to scheduling and program transitioning

If you haven't already, we suggest that you work closely with your Sylvania Division Dean and his counterpart at SE to develop 'scheduling protocols' which could serve as an agreed to road map for scheduling rooms. Additionally, as you know there will be numerous logistical issues in need of addressing as you prepare for and implement your move to the SE Center. Again, we urge that you work with your Sylvania and SE Center Division Deans to identify and resolve issues.

Establishing closer ties with local area high schools in regards to bringing their students on board

We support this goal and at the same time want to acknowledge the difficulties created by AutoDesk when they discontinued to AutoCAD Consortium which had enabled PCC and area High Schools to purchase, at a deep discount, software.

Developing additional coursework in a Distance Learning format

Developing and offering coursework in a Distance Learning format might be a strategy to re-engage those high schools who no longer are able to afford AutoDesk software. This, of course, would need to be done consistent with software licensing requirements.

Marketing our program to the community

Given your pending move to the SE Center we urge that you begin working soon with PCC's Marketing Department to develop materials designed to attract students to not only Sylvania, but ultimately to SE as well. Given your willingness to relocate the program, both Sylvania and SE are committed to finding resources to facilitate the move.

Closing Comments

It was immediately obvious to us that you take great pride in this program and have dedicated countless hours to continuously improve your offerings. During the past decade or so you have been faced with the elimination of your 2-year degree, a 50% reduction in your full time faculty, a reduction in offerings, a substantial increase in software costs, offering select courses at the SE Center and now the challenge of moving your program, in full, to the SE Center. You are to be commended for the forthright and professional approach you've used in successfully addressing each of these, resulting in a thoughtful, well developed and successful certificate.

In closing, we want to thank you for a very thoughtful, well organized written Program Review and engaging presentation.

Administrative Response submitted by Jeff S. Triplett on behalf of the Deans of Instruction.

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