On March 16, 2012 the Microelectronics Technology (MT) SAC presented their Program Review findings to an audience of PCC administrators and others with an interest in the discipline. Both the written report and the presentation were highly professional, informative and thought provoking. We wish to commend you on the completion of an excellent program review process, and particularly for your strong and thoughtful approach to assessment on many levels. Your presentation format was unique and provided ample opportunity for questions and discussion, which was enlightening for us all. We are impressed by the commitment and success of the MT SAC to their mission.

This Administrative Response will: A) note particular highlights of the MT Program and Program Review, B) review your approach to outcomes and assessment, and C) provide the administrative response to the SAC recommendations.

A) Of Note

We were particularly impressed by the following accomplishments:

- Professionalism in Program Review, both the presentation and the written report were thorough, completed to high standards, and helped us understand your work. Each requested area was addressed directly and clearly.
- Instruction and program which adheres closely to the experience students will encounter in industry
- A close and long-standing partnership with Intel
- A vital and highly engaged Industry Advisory Committee
- Responsiveness to a continually evolving industry sector and a focus on common skills, as evidenced by:
  - Collaboration with the emerging solar industry to develop the Solar Voltaic Manufacturing Technology AAS and Certificate of Completion.
• Developing the new Automated Manufacturing Technology AAS.
  • Proactive response to industry-linked enrollments fluctuations and dips, with dual strategies of curricular additions (see above) but also outreach and recruitment.
  • A well-designed outreach program to reach a variety of audiences including high school students, un- and under-employed, and veterans, resulting in an increase in enrollment of 70% from 2010 to 2011 (while many other CTE programs saw growth of 5 to 10%)
  • Responding to data about retention issues (in prior Program review) by adjusting second year work to reduce load on students who also had to work.
  • Ongoing attention to course-level revisions to respond to industry changes and better serve students.

The MT SAC is clearly approaching programming and the serving of students with an attitude of continuous improvement. This is particularly impressive given the pressures of growth. PCC continues to support this expansion within available resources (and while addressing other demands).

B) Outcomes and Assessment

Microelectronics has undertaken a strong and thoughtful approach to outcomes and assessment at many levels and for different audiences (college accreditation, Perkins, and industry) all woven together with intentionality. This represents a tremendous amount of work particularly given your several degree offerings and relatively few faculty. We strongly commend you for your work (and recognize your related workload concerns that are brought up elsewhere.)

1. College Core Outcomes

Microelectronics Technology has thoroughly documented College Core Outcomes in the review and accurately reflects this mapping at the college website (thank you)
http://www.pcc.edu/resources/academic/core-outcomes/avs.html

Based on your Program Review and our own observations, we concur that your curriculum particularly helps students to achieve PCC core outcomes of
communication, problem solving and professional competence by enhancing their skills in these areas.

2. Program Level Outcomes

Microelectronics Technology has well developed program level outcomes for their degrees and certificates:

- Microelectronics Technology AAS Degree
- Solar Voltaic Manufacturing Technology AAS Degree and Certificate of Completion
- Automated Manufacturing Technology AAS Degree

3. Assessment of outcomes and assessment driven change

Assessment was identified as an area of focus for PCC in a prior accreditation visit, and the April 2010 Interim Accreditation Report notes that: PCC must document “progress in demonstrating, through regular and systematic assessment, that students who complete their programs have achieved the intended learning outcomes of degrees and certificates. Further, the college must begin to demonstrate, in a regular and systematic fashion, how the assessment of student learning leads to the improvement of teaching and learning.” While our most recent NWCCU visit acknowledges our significant progress and removes the specific recommendation, it remains vital that we maintain our focus on assessment.

We highly commend Microelectronics Technology for their work on assessment and assessment driven change. You have clearly identified assessment methods, documented your completion of these assessments, and identified plans for further assessments. Furthermore, you have identified the changes you are considering based on the results of the assessments. We look forward following the progress of MT in their assessment work in the years to come.

Your Program Review report presents significant documentation of your assessment plans and methodology. The rubric and processes for the assessment of outcomes (for example “understanding of process equipment”) are particularly rigorous and meaningful. Documentation of assessment results is also extensive and useful. Your work in program level assessment can serve as a model to other SACs.
C) Administrative Response to Microelectronics Technology Recommendations

We support many of the MT recommendations. In those areas of agreement, we note that some are more constrained by funding availability, and that requests dependent on funding are typically subject to a variety of campus and district based allocation processes. Overall, we have the usual challenge of supporting worthwhile and effective disciplines in a time of growing competition for limited resources. The question becomes, what can we do with the resources we have now? In that spirit, here are administrative responses (in italics) to the SAC recommendations contained within the MT Program Review.

(Note, the MT Program Review made recommendations in a paragraph format, which I have summarized and paraphrased here in the interest of succinctness.)

1. Implement strategies to address weakness in circuit trouble-shooting skills of our students both at a system level and component level based on our equipment trouble-shooting skill assessment.

_We applaud your use of assessment to identify curricular and pedagogical changes._

2. The administration should realize that assessment activity for some CTE programs cannot be done without additional resources or reduction in other faculty responsibilities. For future assessment requirements, we request administration to provide faculty with additional resources to fulfill these requirements, or reduce other requirements of faculty. We also recommend that the college can waive or simplify program reviews for departments that are going through other assessments such as Perkins assessment.

_We recognize that accountability requirements have placed differential and increasing demands upon programs, with CTE programs that also benefit from Perkins funding having even more documentation requirements. The nature of this work is also cyclical and at times does not align well. PCC’s strategy has been to provide support resources (the Learning Assessment Council, Workshops, Consultation, etc.) rather than reducing other faculty requirements. The DOIs cannot offer another solution at this time, but we do note that through Program Review this theme has emerged as very important to faculty. We continue to share_
this perspective and to make others aware of this concern.

3. Marketing and outreach

   a. We highly recommend that the funding for our current part-time recruiter position be implemented long term.

   This position was proposed and funded as a one-time expense, and the funding associated with the position will be fully expended at the end of the 11-12 fiscal year. MT will need to identify this position as a permanent need through the division new staff request process, wherein it will compete with other needs of the division. Since program level recruiters are unusual at PCC, and permanent funding is in short supply, MT may want to consider other strategies for recruitment. This will be a good topic for discussion with your new Division Dean in the Fall.

   b. More assistance from the college on marketing will also be appreciated.

   We suggest you write-up what kind of marketing support you would like to have, and then work with your Division Dean for advocacy and to see what can be accomplished. The college does have some resources in this area and there may well be assistance available.

4. We recommend that a continuing funding source for MT specific tutors be identified.

   We support tutoring and understand the relationship of tutoring to student success. Similar to #3a, permanent staffing and funding requests will need to go through the division. There may be an advantage in developing a tutoring plan (and funding request) that either extends across multiple CTE programs, or integrates with other campus tutoring programs.

5. We suggest to the college that Donna Drayer’s position be dedicated to the support of MT department alone if possible.

6. Donna Drayer is indeed a great asset to the program and her “station” during the Program Review presentation was informative and highly relevant. It is very understandable that MT would like to have Donna devote more time to the program. However, Donna’s position is both part-time and funded by Perkins, and both of these factors place limits on how much time she has available for MT students.
Again, when your new Division Dean is on board, it will be important to let her know about the unique needs of the MT program.

7. An equipment-funding plan that recognizes our higher level of need, and the cyclical nature of need. One strategy is to allow us to rollover unspent budget from year to year as a “rainy day” fund for our equipment.

This is a significant issue that comes up for many CTE programs, and a more systematic consideration of process and needs is a good idea. At Rock Creek, the MM&T Division is looking at equipment funding models, under the leadership of Irene Giustini. In the Fall when your new Division Dean is in place, consider asking her to work with Dean Giustini to explore what is possible.

8. We also have certain recommendations concerning PCC policies:

   a. Financial aid should not be tied to full or part-time enrollment.

Financial aid guidelines are for the most part set at a Federal, not local level. The college does not have discretion to change PT/FT eligibility requirements.

   b. Math courses need to be tied to secondary education math levels.

We agree there should be a better connection of CC math with secondary. This is a subject for the Math SAC, and we understand that this is one of many success and retention initiatives they are considering.

   c. Transfer students need to know which courses are equivalent and which are substitutions upon program entry.

We agree in theory, but would need more detail to provide a reasoned response. Please consider developing a list of typical “transfer-in” courses, for discussion with the registrar to see if standard equivalencies might be developed for some.

   d. Faculty department chairs need more release time. Any release time needs to be based on current enrollment, not on the previous year’s enrollment.

While referring you to #2 above, we also note that the formula for FDC release time was developed through a multi-year process by a task force comprised of faculty and division deans. For a variety of reasons (the need to anchor compensation in final
data being a significant one) PCC adopted the model of basing compensation partially on the prior years enrollment. Over time the formula has worked pretty well to take into account the variety of different activities by FDCs in different disciplines, and accounts for differences in CTE and other programs. While we have made some adjustments over time (such as allowing for co-chairs in the mega-departments such as Math) we do not anticipate significant changes in this model.

Additional Administrative Suggestion

During the Program review, faculty noted that teamwork was a critical soft skill for students, and identified providing appropriate instruction and assessment as a challenge (faculty may not have the expertise to teach in this area.) This led to a discussion of what professional development might be available for faculty who need to teach these skills. We appreciate your raising this issue and will investigate possibilities for making this kind of training available generally, but also suggest you contact Linda Blanchette (PCC Staff and Organizational Development Facilitator) directly to explore what might be available or developed.

Closing

We want to again thank the MT SAC for sharing the results of your program review with us. We very much enjoyed learning about your challenges, your successes and your plans for the future. We look forward to supporting your on-going work on continuous program improvement.

Administrative Response submitted by Birgitte Ryslinge, on behalf all your Deans of Instruction

Scott Huff, Cascade
Julie Kopet, South East & Extended Learning Center
Birgitte Ryslinge, Rock Creek
Jeff Triplett, Sylvania