On February 18, 2011 the ESR SAC presented their Program Review findings to an audience of PCC administrators and others with an interest in the overlapping disciplines of Environmental Science and Environmental Studies. The Deans of Instruction sincerely appreciate the work of the ESR Subject Area Committee (fundamentally the work of Tom Robertson and Kevin Lien) over the years, and particularly in the preparation and completion of your most recent Program Review. Both the written report and the presentation were informative, thought provoking, thorough and complete. Your program review addressed almost all guidelines. Your presentation provided ample opportunity for questions and discussion, which was enlightening for us all. We are impressed by your commitment to your mission of educating and preparing students for transfer and in some cases employment or graduate school and/or technical programs in Environmental Sciences and Studies.

This Administrative Response will: A) note particular highlights of the ESR Program and Program Review, and B) provide some comments, and C) give our administrative response to the SAC recommendations.

Of Note

The sciences serve a critical and essential role in fulfilling not just the PCC mission but also addressing the national agenda of increasing success in the STEM fields (science, technology, engineering and math). Within this context, the ESR program serves a particularly essential role in supporting and advancing PCC’s and Rock Creek’s commitment to advancing sustainability and the preservation of our fragile environment. The ESR program and the “living laboratory” of the PCC Rock Creek Environmental Studies Center (RCESC) provide truly unique educational opportunities for students who wish to learn more about, or commit to, careers focused on the local, regional and international environment. Your accomplishments are particularly notable in that you are only two full time faculty (and also are full-time faculty in biology), with which you manage two important transfer programs, regularly interface with PSU colleagues, manage the RCESC, partner with organizations to provide opportunities for students, and engage in grant applications (to name just a few).
Here are some of your accomplishments we would like to highlight:

- You are an integral part of RC’s campus-wide commitment to sustainability, through curriculum, through access to the RCSC and supporting the “RC Loop.” ESR students frequently take active student leadership roles in sustainability.
- Your management of the PCC Rock Creek Environmental Studies Center (RCESC), truly an environmental jewel and asset to the campus, the community and the region.
- Curriculum and pedagogy which supplement rich content with the development of essential skills for success: critical thinking, teamwork, oral and written communication, lab skills
- On-going and close cooperation with Portland State University, which is the main transfer destination of your students, a coordinated approach to developing the undergraduate transfer program.
- Supporting a great many lower division collegiate (LDC) students from other fields through the ESR 171, 172, 173 sequence classes as their science lab course requirement.
- Unique opportunities for students, a focus on student success
  - Transfer to Portland State University in either environmental science or environmental studies via a “seamless transfer program” which allows students (in most instances) to enter PSU as juniors.
  - Utilization of a wide variety of pedagogies: lecture, available technologies, hands-on labs, field trips, quantitative field experiences, student centered learning (inquiry based), lecture/lab demonstrations, service learning.
  - Unique courses such as “Ecology and Natural History of the Siskiyous”.
  - Connecting students with the professional world: exposure to advanced instrumentation and internships with environmental based organizations, professional speakers from agencies and private sector.
  - Working to provide undergraduate research opportunities through a variety of programs (such as CUR: Community College Undergraduate Research and “Undergraduate Catalytic Outreach and Research Experience” UCORE).
  - Facilitation of student enrollment in external student development programs (i.e., Oregon Institute of Marine Biology, Hatfield Marine Science Center, COSEE (Centers for Ocean Sciences Education Excellence).
- Your work so far on assessment of outcomes and assessment driven change: while there is some work to be done in this area (see section B) you have made a strong start in the following areas:
  - Mapping of your courses to college outcomes, complete and up to date as of 2010.
  - Program Review provides effective discussion of how ESR addresses the college core outcomes of Communication, Community and Environmental
Responsibility, Critical Thinking and Problem Solving, Cultural Awareness and Self-Reflection.

- The examples you provide of assessment driven change in ESR 201 and 202.
- While not specifically referenced in your program review, we appreciate that ESR provided their Learning Assessment Plan in Fall 2010, planning to assess the following college core outcomes in these courses. We look forward to seeing the results:
  - Communication in ESR202 in 2010-11
  - Community and Environmental Responsibility in ESR 201 & 202 in 2010-2011
  - Self-Reflection in ESR 171 in 2011-12
  - Cultural Awareness in ESR 199/140 or ESR 201 in 2011-2012
- Effective (albeit small and anecdotal) and “deep” qualitative survey of student perceptions for this program review and to assess attainment of course and program level outcomes
- Students and PSU faculty are highly positive about ESR, the courses, the facilities, the instructors: there were several comments that RCC Rock Creek transfer ESR students were better prepared than students who completed their first two years at PSU.

- Instructor Qualifications that are up to date, effectively address differential course requirements, as well as provisional approvals, and posted as of May 2011 (thank you!)
- Concern for, and attention to, increasing the diversity of students in ESR
- Faculty commitment to professional development and staying current in the field (examples include participation in COSEE and Northwest Center for Sustainable Resources).
- Cultivating partnerships
  - Vernonia School District: PCC ESR students to engage in service learning with Vernonia students at all grade levels, beginning with 4th grade students in the development of a fish hatchery.
  - Working with a variety of agencies to provide summer internships for students (i.e., Oregon State Parks Department, OSU Dept. of Forestry, University of Wyoming – Wolf Research Project).
- Curricular enhancements: in addition to course level improvements, ESR is working with Landscape Technology to develop the new Natural Resources Management AAS option.
- Support of and contribution towards PCC goal of access
  - Offering the non-science majors laboratory based sequence 171 (Environmental Science – Biological Perspectives), 172 (Environmental Science – Chemical Perspectives) and 173 (Environmental Science – Geological Perspectives) at all three comprehensive campuses.
Working with part-time faculty to allow the delivery of the non-science majors laboratory based sequence at Columbia Gorge Community College (CGCC).

Delivery of ESR 171 at some high schools as part of the dual credit program.


Attention to providing access for students with disabilities.

Comments

Assessment of outcomes and assessment driven change

As noted above, the work of the ESR SAC has been exemplary, and the program review was very thorough. One area that we hope you will continue to expand on is assessment driven change. Assessment was identified as an area of focus for PCC during our very recent 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.”

Your Program Review report documents that you have engaged thoughtfully with the increasing focus on assessment. As a result of this process, you have noted a lack of a tracking process for students once they leave PCC. You would like more data, and a way to work with that data, which is something that the office of Institutional Effectiveness can assist with (and this is addressed a bit in the recommendations section.)

These comments are not a request that you provide an update or revision to your program review document, but only that you give particular attention to assessment driven change and upcoming milestones established by the Learning Assessment Council and PCC Academic Services (such as 2011 Assessment Reports). We understand that the focus on assessment represents challenges for a smaller SAC, and encourage you to stay in communication with your Rock Creek administration and Kendra Cawley about the work, so we can be certain that you are accessing the available support (see recommendations for further discussion).
Administrative Response to ESR Recommendations

The ESR SAC is clearly approaching programming and the serving of students with an attitude of excellence and continuous improvement. This is particularly impressive given the pressures of growth (over 60% increase since 2003) in SFTE. PCC and Rock Creek continue to support this expansion within available resources (and while addressing other demands). We agree that the continued growth of the ESR department, particularly at the RC campus, presents opportunities which are positive and also challenging. As you note in your review, continued growth places pressures on facilities, budgets, and staffing. The recommendations section of this response will discuss what may be possible in regards to these on-going needs. Your SAC recommendations are below, each followed by our administrative response (in italics)

1. Addition of a half-time position (other half-time based in a science department): This position would teach and coordinate the ESR 171-173 courses college wide.

   As you know, the growth experienced by PCC has placed pressure on almost all disciplines, which in essence compete for a limited opportunity for additional full-time faculty. We’ve moved to a process (at least for the time being) where individual campuses establish and fund their own staffing priorities. Last year at Rock Creek we added 11 full-time faculty positions, but ESR was not among them. We are currently in the process of developing the new Rock Creek staffing list, which we will then implement as funds become available. The suggestion/strategy of a new blended position (with another science) is a good one. Currently, Biology and General Science have also identified a desire for additional full-time faculty at Rock Creek. It is important that you work with your Division Dean to ensure that staffing requests for ESR get into our campus process so that they can be considered and prioritized along with the other needs.

2. Dedicated section of teaching lab for ESR: This may force the addition of another lab at Rock Creek. This lab would serve both the ESR majors courses and the non-majors courses. It would allow labs to be set up and maintained for all sections. Other field/lab-based courses could also make use of the lab (Biology 141-143 and Biology 160).

   There is pressure on science labs in general at Rock Creek. The current Bond program supports the addition of general-purpose classrooms (approximately 25) at Rock Creek, but did not plan (nor include funding) for any of these classrooms to be science labs. We need to engage with this issue at the campus level to see how we can address science labs as a whole (both space and higher facilities costs), and look at the various needs holistically including ESR, Biology, and new Health programming. There is not a simple solution, but coordinated planning across the sciences and health at Rock Creek is the place to start. Let’s plan on starting that conversation in Fall 2011.
3. Dedicated funds for maintaining the RCESC and teaching monitoring equipment. These funds would be dedicated to maintaining boardwalks, vegetation planting, restoration, trail maintenance etc. as well as maintaining the ESR equipment. Current funds only allow for purchase of supplies.

Please put together a brief funding proposal, to include your estimates of an annual budget for this purpose along with short descriptions of why the regular funding is needed and the consequences of not funding. Please submit the proposal to your Division Dean and myself. I (Birgitte) won’t promise funding right away, but at such a proposal will support planning and we will see what we can do. It also positions us to be ready to take advantage of grant funding opportunities, which sometimes arise quite suddenly and require a rapid response. The RCESC is an incredible and unique resource for the campus, district and community and deserves some on-going investment.

In the short term, if there are needs (perhaps “catch-up from lean years) that can be addressed via one-time funding, I also encourage you to develop and submit (through your Division Dean) a proposal with costs. We have been able to address many program needs with one-time funding (also known as “margin dollars”).

Additional lab tech support: Dedicated lab support for the ESR and other field based courses in biology. This could be funded student support for the ESR classes.

Similar to the advice above, please develop and submit a more specific proposal of what you need. This will be subject to funding availability and prioritization, but it does get your need into the campus queue. If you are open to considering flexible supports (student help, combining resources with other programs, etc.) we (Rock Creek) may be able to provide some relief.

Additional funds dedicated to faculty development: The annual dedicated travel funds need to be around $1,500 to $2,000 dollars per faculty member across the district. This would allow: Travel to conferences associated with professional organizations; Attendance at workshops – dedicated to professional development

We appreciate your frustration in finding sufficient funding for travel and conferences, many of which are national. Local budgets for training are also a campus resource, to be negotiated with the Division Dean, who must balance the needs of all the programs in the divisions. There are supplemental funds for professional development available through staff development and the TLC’s, and yes, there is some paperwork involved in the application process. These supplemental funds are outside of the instructional budgets, and are an important resource for many different programs and groups. Consequently, this is not a resource that we have the ability to reallocate to Division Deans. Our best advice at this moment is to work closely with the available funding sources and look for
opportunities where funding can be combined and leveraged.

**Assistance (including funding) for assessment and evaluation of program:** additional resources for assessment and student tracking. Also teaching effectiveness and core outcomes evaluations take a great amount faculty time.

We understand the demands which assessment and evaluation place upon SACs, particularly the smaller ones such as ESR. Last year the DOIs made available a small amount of funding (10 hours) per SAC available to compensate part-time faculty who might wish to assist full-time faculty in working on assessment. The Learning Assessment Council (http://www.pcc.edu/resources/academic/learning-assessment/) also provides support, guidelines and best practices. Another resource is Kendra Cawley, PCC Dean of Instructional Support. Institutional Effectiveness has been a good resource for many SACs as they grapple with how to develop and track meaningful data points, so please contact them to see what is possible for tracking students while they are still at PCC, and once they leave.

**Closing**

Tom and Kevin, thank you again for sharing the results of your program review with us. We very much enjoyed learning about new developments for Environmental Studies/Sciences, 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