Program for Women in Science and Engineering (PWSE)

This document outlines the institutional and program response and action plan for issues raised in the spring 2011 program review for the Program for Women in Science and Engineering (PWSE). It is based on discussions with PWSE staff and a meeting between Program Director Karen Zunkel, Associate Provost David Holger, and Executive Vice President and Provost Elizabeth Hoffman. The external review team report was received by Iowa State from the review team on May 13, 2011. For many areas the review confirmed that PWSE is making progress and in some cases has the potential to serve as a national model. This report will focus on areas of concern or opportunity the program review team identified.

The review team report reflected on progress since the last review, answered key questions identified by PWSE Advisory Board and Staff, and provided additional recommendations/observations from the review team. The external review team report is available from the PWSE website, under the data/assessment tab. The sections below provide institutional context/response and where appropriate action items/responsible parties for future follow through.

**Progress on issues raised in last review:**
The last review, conducted in spring 2005, identified three key areas for concern/action. The review team in 2011 noted that significant progress had been made on two of these issues: clarifying program mission and clarifying roles of providing programs versus creating partnerships for institutional change. However, limited progress had been made on providing institutional disaggregated data. The solution proposed after the review six years ago was the implementation of the data warehouse. That is still not a viable option for PWSE. However, in the interim, PWSE has developed a relationship with the Office of the Registrar to provide some additional data.

PWSE and ISU Administration agree that access to data is still an area of concern/action.

**Actions:**
1) *PWSE will continue to leverage the relationship with Office of the Registrar.*
2) *Dave Holger and IR will continue to work on fully implementing the data warehouse records to allow for disaggregation of data associated with recruitment, retention, graduation, student success, etc.*

**Questions the review team was requested to answer:**

The questions related to the Impact PWSE is having on University mission and strategic plan, PWSE’s progress on its own strategic plan, and PWSE’s impact on the state of Iowa were all positive with no concerns or opportunities shared by the team. The following are the questions for which areas of concern or opportunity were identified by the team:

How well does PWSE meet the needs of pre-college and undergraduate STEM students?

In the continuum of services outreach, recruitment, etc., the team shared that there were opportunities to more fully develop programming for ‘high school recruiting’ and in the area of ‘leadership/career connection for upper-class students’.

**High School Recruiting:** Within the administrative structure of Iowa State, the Office of Admissions has primary responsibility for general recruiting of students, passing along information to academic colleges for coordinated recruiting efforts specific to departments/majors in that college. The review team members all came from institutions where they are housed within the College of Engineering, and as such have a different
perspective/role related to recruiting. That being said, PWSE does in fact to some things could be considered part of the ‘recruiting’ process for high school students:

- Admissions sends out postcard/letter to prospective female STEM students letting them know about PWSE
- PWSE sends names of all participants of the career conferences to be included into the admissions prospective student pool.
- PWSE is an optional activity every day for prospective students and families
- PWSE sends emails to high school seniors to inform them about scholarship and learning community opportunities.

However, since the review team has highlighted this as a potential area for opportunities, PWSE is suggesting the following actions to insure that in our decentralized system is fully optimizing recruitment of female STEM students.

Actions:

1) **PWSE will meet with Admissions and recruitment staff in key colleges to clarify roles/expectations and discuss any additional strategies PWSE/colleges might be pursuing to leverage each others’ efforts.**

2) **PWSE will discuss with Admissions the possibility of developing customized recruitment of students who have attended the Taking the Road Less Traveled Career Conferences.**

Programs for upper-class students: Most of the opportunities for students to connect with PWSE after the second-year are in leadership roles associated with the program (peer mentors, student role models, ambassadors, service on advisory board, etc.) PWSE has previously offered specific programs for upper-class students (junior/senior – transition to the workplace retreat, etc.) Due to staff and funding shortages, PWSE Staff and Advisory Board have prioritized staff time/resources on programs impacting students in the first and second year and for new transfer students. This decision was based on most students leaving STEM during the first two years and the belief that once students are juniors or seniors they need to be connecting with their department/disciplines. ISU administration also supports this philosophy/approach to prioritizing resources.

Actions:

1) **PWSE staff will administer a brief survey of upper-class students to determine perceived gaps or unmet needs. If there are items raised in this survey, PWSE Staff and Advisory Board will determine if there are low cost/low staff time items that could be done to fill those needs or if there are other programs/services/units on campus that would be better suited to addressing those needs.**

Is PWSE efficiently prioritizing the use of its resources? Does PWSE have the necessary resources to meet expectations today in the future?

There was a theme with the report and in the response to this question that comes down to the basic premise that PWSE can’t continue to do everything they are doing with the current staff size. Two potential ways to reprioritize staff time include: 1) eliminating pure outreach programs, if there is no way to directly measure recruitment benefit for ISU (PWSE student role model program reaching 6000 students each year and career conferences reaching 3000 each year) and 2) Limiting the scope of majors we serve (drop program/services to those STEM disciplines where women are over-represented – animal science, biology, nutritional science, etc).
As the land-grant institution in the state of Iowa, Iowa State does have a role in providing outreach programs to the state that may or may not directly connect to student enrollment. PWSE does know that some students attending the career conferences do eventually enroll and graduate in STEM disciplines. That percentage, while only in the 20% range, may not seem like a strong contribution, some participates would be pursuing STEM at other institutions across the state and country. PWSE staff is also not in favor of ‘dropping’ degree programs from connecting with PWSE. If that was the case, the program could just evolve to being a program of the College of Engineering with a few selected physical science/mathematical science degree programs thrown in. The country is in need of graduates in all STEM majors, so PWSE sees value in continuing to support women across all STEM majors.

Action:
PWSE will continue to balance programming efforts with available staff and financial resources. PWSE will continue to work to increase the funding/staff size of PWSE to more appropriately meet the program needs. (This is also related to areas of staffing and fundraising in the recommendation/concern section below.)
This will continue to be an area of ‘oversight’ and ‘guidance’ from the PWSE Advisory Board

Is the PWSE Advisory Board effectively supporting the needs of the program?
To increase visibility within the institution, the review team suggested that PWSE create a university-wide internal advisory board, separate from the external advisory board.
PWSE staff agrees that creating awareness and support from within the institution is an area where PWSE must focus attention. This is critical for any/all centrally administered programs. However, PWSE staff questions whether creation of an advisory board is the appropriate mechanism to garner that visibility/connection. What would be the role of this internal board as compared to the external board? PWSE staff members see value in the diversity of ideas and perspectives that come from have an advisory board that as internal, external, and student representation.

Action:
As an alternative way to increase visibility within the academic colleges PWSE serves, the EVPP administration recommends that PWSE contact the appropriate associated deans in each of the four colleges to request that a presentation be made by PWSE for the administrative leadership team (including dean, associate/assistant deans, department chairs and unit leaders) in the college this year (with a plan for a ‘touch base’ presentation at least every other year).

How does PWSE compare to programs at peer institutions?
PWSE is unique in supporting all STEM majors (not just engineering) and in reporting to the Office of the Executive Vice President and Provost (instead of a Dean). It is also very unusual to have a director with a split focus/appointment. The team recognized that several programs within PWSE could be viewed as national models (outreach programming and transfer student programming).

Action:
As time and resources permit, PWSE will strive to share and help influence national initiatives and other programs across the country by sharing research on our initiatives and programs.
How can the University more effectively support PWSE?
Three different topics were raised by the review team: the need for an advocate for PWSE, the impact of the loss of the administrative support position, and the possibility of reaching out to new faculty to engage them. (The advocacy and support staff items are addressed below under the ‘Areas of concern’.)

Action:
PWSE developed a one-page brochure that was distributed to all new faculty members as a part of the new faculty orientation program in August 2011.

Observations/Recommendations from the review team based on areas of concern

Advocacy
Recommendation from team: PWSE needs an advocate within the senior leadership of the institution.

Since PWSE reports to Associate Provost Dave Holger has some role in keeping the interest/welfare of PWSE and the students it serves on his list of priorities. However, Executive Vice President and Provost Hoffman suggested that this could also fit under the scope of Dawn Bratsch-Prince in her new role as Chief Diversity Officer for the institution.

Action:
Karen will set up a meeting to discuss this identified need/role with Dawn.

Fundraising
Recommendation: PWSE needs to work with the ISU Foundation on fundraising.

Two recent develops associated with this recommendation.

1) ISU and ISU Foundation administrators have loosened their position on PWSE relying on GUFE funds instead of approaching new companies. PWSE will now be allowed to develop relationships with companies for strategic support requests, with prior approval/work with the ISU Foundation.
2) Leadership in the EVPP office have been in conversations with the ISU Foundation of having dedicated access to part of a development officer for purposes of raising funds for central academic initiatives/programs. If this comes to fruition, PWSE would be one of the areas that would be in the mix for support.

Action:
Karen work with the ISU Foundation to develop a plan for approaching additional companies, private donors, etc.

EVPP Hoffman and Associate Provost Holger will continue to work with the ISU Foundation on support for central academic fundraising.
Administrative support

Recommendation: Dedicated administrative support is required.

PWSE has been requesting this ever since the retirement of the previous support position. There has been some temporary centralized support from the Office of the EVPP. However, this arrangement has negatively impacted PWSE staff and programming efforts. There is a sense that PWSE might be gaining support from EVPP that the full staff sharing model isn’t working for PWSE. There seems be agreement that a support staff person for PWSE should be included in the budget planning process for FY13.

Action:
PWSE will continue to make the requests/case for reinstatement of an administrative support position within PWSE – for FY13 or earlier if funds available. Dave Holger has agreed to prioritize and support this request for FY13.

Resource limitations

Recommendation: Strategic thinking about who we serve with limited resources (e.g. discontinuing programs for departments with high female populations, reducing programming to those majors/departments that are doing their own program (e.g. Women in ME), leveraging/requesting funds from departments with an interest in supporting female students, etc.) This might free up time/money to expand to provide programming across the entire undergraduate spectrum (more programming for juniors/seniors).

Agree that it is always important to align resources to serve students and achieve the mission of the program. Reducing service to students in majors with high female populations occurs naturally already (we serve a smaller percentage of women in Human Sciences, biology, etc.) We don’t agree with the idea of limiting our services to students in departments where the departments have taken an active role. There are some programs/services that we can provide centrally in a more efficient manner. There are some programs that departments are best suited to provide. What is critical is that in those departments that are doing focused programming for women that PWSE staff is connected/supportive of those initiatives to avoid perceived or actual duplication. In general PWSE staff and ISU administration are not in favor of discontinuing/limiting service for first and second year students in some majors so that we can expand programming to juniors/seniors. We are comfortable with providing the ‘front end’, first two years support/programming with the idea that students need to connect with majors/departments and other ways during their junior and senior years. However, since the review team had a sense that juniors/seniors felt like there were unmet needs, it is important for PWSE to get a better understanding of those needs and how through existing programming, new programming, or by partnering with others those needs can best be met.

Action:
PWSE will survey juniors/seniors to determine potential gaps, perceived needs that are not being met for this population of students. Will use this information in discussion with the advisory board and staff to determine what if any changes might be made to PWSE offerings.

K.Zunkel, September 2011