**Biological, Health & Environmental Sciences Responses to IPBT**

**BHES Division**

1. **Reflecting back on your equity success rates, what specific initiatives have had the most positive impact on your success rates? How is your department sharing these effective practices among full-time and part-time faculty members?**

The BHES division’s commitment and work around Equity Success rates has shown remarkable results in both enrollment as well as making sure our students have the best chance at succeeding in their educational and career goals.

In 2010 – 2011 the **equity gap was at 11%** with an actual **head count of 3008 students in the targeted groups.** In 2011- 2012 the **equity gap was reduced to 10%** with an **actual head count of 3508 students in the targeted groups.** In 2012 – 2013 the **equity gap has decreased further to 9%** with an actual head count of **4079 students in the targeted student group.**

Not only are we attracting more students from our targeted student population but we are also striving to make sure they realize their potential.

We use the platform of division and department meetings to share best practices, ideas for success, challenges in the classroom etc.

We maintain open avenues of communication especially between the division office, faculty and staff to share ideas and best practices both in and outside the classroom.

1. **What do your SLO/PLO and Equity assessment results reveal about resources needed to achieve higher student success and retention rates?**

All our departments are engaged in SLO/PLO work to different levels of completion. Biology, MLT and Nursing have assessed all PLOs; Health Technologies has finished more than 80% of their work. This despite the fact that MLT has had no FT faculty for the last year and HTEC has only one FT faculty who is in her third year of tenure and is working hard to catch up. Environmental Studies addresses this question in their department answers.

The SLO and PLO work reveal that more attention is needed to provide students with the tools for success whether that is through increased staff support in areas like HTEC and MLT. Both MLT and HTEC combined served 2761 students in 2012 -2013 with less than 50% staff support.

Biology’s enrollment has increased to 6832 students, an increase of 13.7% in enrollment over the last three academic years with no increase in laboratory support. Assessments reveal that students thrive with more hands on laboratory exposure as well as access to course resources such as bones, slides, models, and textbooks outside of the formal classroom. The Science Resource Center gives them a venue to congregate form communities, study and work on group projects. While the Science Resource Center is open on weekdays; extending the center’s hours to weeknights and weekends will give our non-traditional students a leg up in their educational endeavors.

1. **As you look at the enrollment numbers on your departmental program review data sheets, please tell us what you have done to increase enrollment or, if your department has decreased, please tell us what your plan is for increasing enrollment this coming year?**

I have worked very closely with all department chairs to examine areas of high student demand and increased course offerings or decreased them accordingly. We have poured over data that shows times when students are more inclined to take classes and responded very quickly to changing student trends. The pursuit for student enrollment has been very intentional and aggressive but at the same time we want to maintain our success rates and work conscientiously at decreasing the equity gap. We plan on continuing to do the same, as well as explore other ideas.

In the past three years our division has shown strong growth in enrollment with a 8.19% enrollment growth over the past 3 academic years and at the same time the equity gap has gone from 11% in 2010- 2011 to 9 % in 2012 – 2013.

1. What is your budget planning process? How do you prioritize resource allocation within the division?

The budget planning process is complicated and multi-tiered. It would be too simple to simply follow student enrollment. It has also been challenging, given that all departments have shown robust growth in enrollment numbers. While planning budget allocation it has been essential to consider all funding sources. Some of our departments have grant and/or Perkins funding that supplement their B budgets and this is taken into account when allocating B budgets.

**For each department/program below:**

**With the “year of reflection” next year, please talk about your Student Success Equity Plan development process, sharing both your best practices for targeted populations as well as key questions or areas of concern in improving your success rates for these individual groups. [Feel free to refer in part to your response to question “1” above.]**

The division and departments are seriously engaged in the Student Success Equity Plan development process. The Dean, Department Chairs and several staff have participated in the preliminary groundwork for a more solid Division equity plan, meeting with Veronica Neal to discuss how we might approach this work. Faculty have also signed up to serve on campus equity work. The ES department held a retreat in March to discuss their Equity plan with Veronica Neal. While more formal planning needs to be laid out, the success rates of our targeted student populations and the steady reduction in the equity gap division wide are a good indicator of our commitment to the Student Success Equity Plan.

**Biology:**

**II.A.2 and II.A.3. The “equity gap” actually refers to the difference in success rates between our “targeted” students and our “non-targeted” students, not simply the increase or decrease in the success rates of each of these groups (this is a common misunderstanding across our campus). What thoughts or plans have you considered regarding what you might do differently to improve the success rate of our targeted populations in particular––as distinct from efforts with the non-targeted population––to move toward closing this achievement gap?**

The equity gap in Biology has decreased steadily while at the same time the over all enrollment of targeted student groups has increased.

The **equity gap in 2010 – 2011 was 13%** with targeted student enrollment at 1754 ;

the **equity gap in 2011 – 2012 was 10%** with targeted student enrollment at 2044 ; and

the **equity gap in 2012 – 2013 was 8%** with targeted student enrollment at 2372.

Our faculty and staff work hard to both identify students at risk and direct students to resources that will enable them to find the tools to succeed. These include both in class tutoring and mentoring via special projects; use of and recruitment of tutors through the Tutoring Center; referring students to the Science Resource Center for additional exposure to science materials and tools and referring students to the SmartThinking online tutoring through the Student Success Center.

* Having the Science Center open on evenings and weekends could assist the nontraditional students,
* Additional B budget funding could afford the faculty and staff the opportunity to offer more hands on laboratory activities and replenish our laboratory supplies
* Additional staff support could help immensely with setting up of daily and weekly laboratory sessions.
* Additional FT faculty would provide dedicated support for student success.

**II. C Biology has made small but steady gains in the success rate of our “targeted students”, and all groups are above the 60% success level, which is good news. To make more dramatic gains, what do you envision as your process to make headway in these “main areas of improvement”, given that they seem to remain as much of a challenge as ever? In what ways might you address these issues through the development of your Student Success Equity Plan development process?**

1.Continue to Research and Evaluate Student Equity Data Analysis

2. Increase Department and Division support for Faculty and Staff Development

3. Increase and/or Continue Support for Innovative Programs and Services that Focus on

Achieving Student Equity Goals

4. Analyze and Recommend Specific Activities to support Specific Student Success Initiative

**Environmental Studies:**

**III.A.1 and III.B.1 CPR shows 1% on PLOAC statements as being assessed so far, with a plan to complete by the end of Spring 2014. What progress have you made on your PLOs and SLOs?**

The ES Department has 127 total SLO's in the TracDat system. We plan to do the following to progress on our SLOAC’s and PLOAC’s:

For our SLOAC’s- The ES Department Chair will be spearheading this process and working with the full-time and part-time faculty to get the SLOAC’s up-to-date in the following manner:

1. The ES. Department Chair will send out a SLOAC email by June 6th to our faculty reminding them that they need to complete their SLOAC for their classes they taught this Spring quarter.
2. The ES. Department Chair plans to send out two emails about SLOAC's to ES faculty two times per quarter, one at the beginning-to-middle and one toward the end of the quarter reminding faculty that they need to complete their SLOAC for the classes they taught that quarter.
3. The ES. Department Chair plans to evaluate the SLO’s in the TracDat system and verify courses that have not been offered in a year and status those as “inactive” at this time.

For our PLOAC’s- We will need to strategize to plot the best direction forward so that we can meet our responsibilities. One idea that our Dean has advised is that we ought to minimize the number of PLOAC’s so that we can better manage our PLOAC duties.

The ES Department realizes that we need to fulfill our SLOAC and PLOAC obligations and we realize the importance of SLOAC's as a reporting tool to convey what is needed to enhance our student experience (i.e., to communicate equipment and/or support needs for the ES Department and for our classes). However, as we mentioned in our Comprehensive Program Review, though we have several areas where we have steady growth in enrollment, retention and success rates of our targeted and non-targeted populations, we worry about continuing our forward momentum without obtaining necessary resources (adequate full-time faculty and staffing) to complete the tasks expected of us to accomplish what we need to each day, each week, each quarter. Though we will complete our commitments, thus far, with our minimal ES Department full-time faculty and staff, we have been unable to do so (and in a timely manner).

**II.A.4.c The mentor program**

1. **What are the goals of the mentor program and how many targeted” and “non-targeted” students is the mentor program currently serving?**
2. **How much bigger and more effective would you envision the mentor program could become under a new full-time instructor and staff member, especially in relation to increasing the success rate of our “targeted” students? What other resources would you need to support a mentor program?**

Goals of the SRC portion of mentor program- We assist students with text and computer check outs, mentoring and tutoring students in all of our classes. We serve 1500 students per quarter and all students have access to texts, computers, tutoring, and other resources that help our “targeted” and “non-targeted” populations to succeed.

The SRC mentors are there to serve anyone who has a question whether they be a student in one of our classes, a student within our ES certificate or degree program, or a member of the community. Our guests come in and we serve them; we do not qualify whether they are currently taking our classes.

We narrow the gap for our targeted population students, many of whom are in the category of the “tech-have-nots”. In an era where technology will keep moving forward, our ES student mentors work with many students to assist in technology and computer issues where many students need assistance. Our ES student mentors are trained to understand that there should be no assumptions with any single student that comes to us for help. For example, some students who enroll in our Distance Learning classes do not know that in order to watch the recorded segments of our classes, they must have iTunes loaded on their computers. Others may not know how to use a USB or maneuver through the iPrint system or through MyPortal. Our ES student mentors work equitably with all students to help them to be successful De Anza College students in all areas of the student learning spectrum regardless of skill set or prior experience or knowledge.

Goals of the ES outreach and student mentor program- These ES mentors assist faculty to enhance the growth, success, and retention of, and to boost the number of all ES students, both our general education and our ES major’s students. The following are some of the ES mentor duties:

* Working in various capacities with underserved and underrepresented students
* ES career advising services including Internship opportunities
* Promoting internship and ES employment
* Creating a Student Handbook
* Working with students on the De Anza Catalog and the rules for continuous enrollment, catalog rights and ES Dept. Certificates and Degrees
* Assisting faculty with student mentoring with a focus on the three ES certificate and degree areas: Wildlife Science Technician, Environmental Resource Management & Pollution Prevention and Energy Management & Building Science
* Working with students in our three certificate/degree areas to help them get on board with ES careers
* Assisting faculty to increase internship possibilities and career pathways for students
* Participating as liaisons across the campus to expand collaborative efforts with the ES Department
* Using and improving the database tools to provide reports on outreach efforts to assist current students and to encourage new students interested in careers in our three program areas
* Assisting in maintaining outreach records and pertinent data, data analysis and report writing
* Working with the following software applications: Word, Excel, PowerPoint, and social media such as Facebook and LinkedIn

Number of “targeted” and “non-targeted” students- We have students sign in at the SRC staff desk when they are making up assignments for lecture and labs. However, we would appreciate advice on how to collet this data on targeted and non-targeted students. We have never been asked to collect such data and wonder how others gather this information. We would greatly appreciate information from IPBT and/or others on how to gather this information.

**Health Technologies:**

**II.A.2 The “equity gap” actually refers to the difference in success rates between our “targeted” students and our “non-targeted” students, not simply the increase or decrease in the success rates of each of these groups (this is a common misunderstanding across our campus). What thoughts or plans have you considered regarding what you might do differently to improve the success rate of our “targeted” populations in particular––as distinct from efforts with the non-targeted population --to move toward closing this achievement gap?**

The equity gap in HTEC has slowly decreased while at the same time the over all enrollment of targeted student groups has increased.

The **equity gap in 2010 – 2011 was 14%** with targeted student enrollment at 570 ;

the **equity gap in 2011 – 2012 was 12%** with targeted student enrollment at 751 ; and

the **equity gap in 2012 – 2013 was 13%** with targeted student enrollment at 896.

Early identification of at risk students advising students to take Smartthinking online tutoring program for medical terminology and many other HTEC courses –including medical assisting, injections, and required biology classes, in class tutoring through student mentors; encouraging students use of the science resource center to study outside of class, active recruitment to seek more externship sites for students to get more timely externship rotations.

**II. C In this section you write, “Develop national accreditation for our Phlebotomy, Medical Assisting, Insurance and Coding, program: We have not made any progress in this area due to lack of budget. Fortunately, our students are eligible for employment with national accreditation of these programs.” The two statements above seem at odds with each other. Please clarify.**

Develop national accreditation for our Phlebotomy, Medical Assisting, Insurance and Coding, program: We have not made any progress in this area due to lack of budget, and personnel. Fortunately, our students are eligible for employment with**out** national accreditation of these programs.

**III.A No percentage of PLO statements assessed is given. What percentage of PLO statements have been assessed to date?**

HTEC is a one FT faculty department that serves more than 2,000 students. All SLOs will have been assessed by the end of the quarter, however the PLO statements were established by the prior program director. Twelve PLOs were listed. Of these only one has gone through the PLOAC process. (8%)

The new program director who is in her third year of tenure is re-evaluating the PLOs in place and will be working with the SLO committee and her Dean to establish how many PLOs are actually relevant to the work being carried out by the department.

**Medical Laboratory Technology:**

***What do your SLO/PLO and Equity assessment results reveal about resources needed to achieve higher student success and retention rates?***

1. PLO: ASCP exam, only one student has failed the exam since the beginning of the program. Therefore, if a student completes the program then the rate of success if >95%.

Increase the number of students applying for certificates for the program

1. SLO: have completed assessment of all courses

Tutoring is needed to help support students and make sure that concepts are understood and incorporated in their skill level for externships and jobs beyond. Tutors must be knowledgeable in the specific clinical material that is covered in classes.

Laboratory staff to help with the set up and preparation of lab classes is needed. Currently part time instructors are donating many hours to accomplish the set ups. The technical and clinical nature of the labs require make up of mock patient samples, maintenance of instruments and maintenance of bacterial cultures.

To date, most equipment has come from donations; however, this equipment is aging and will need to be replaced, therefore funding for equipment is needed.

1. Equity Gap: 10% is higher than desired but we have also seen a huge increase in enrollment of targeted student groups. We need to address decreasing the equity gap, increasing student success and retention in our targeted student populations Some services that may help are a better understanding of the admission, withdrawal and repeatability of classes and how to navigate the system. We are in conversations around possibly instating pre-requisites in English and Math and/or placement testing, as well as offering tutoring services. Also needed is a better understanding of financial aide.

**II.A.1  It sounds like you have a successful “outreach program”.  Would you briefly describe the specific strategies/factors that have contributed to this success?**

The hard work and dedication of the previous director to develop this program and establish an excellent reputation. There has been and continues to be a dedicated effort to maintain high visibility with the community. Each year an advisory board meeting is held with all clinical sites and potential clinical sites to inform of the progress of the program over the past year and what we hope lies ahead. One way is through the on site-visits to the clinical labs each week to visit the students and the laboratory managers. The quality of De Anza students in externships has impressed the clinical sites. Most of our PT instructors continue to work in the clinical arena and maintain their ties to the healthcare community. Our instructors are dedicated to maintaining the high quality of the program. Additionally the program offers informational meetings twice per quarter these are open meetings for any potential student and students are encouraged to come with an official transcript for review and ask any questions concerning the program. The MLT program also participates in Perkins outreach activities and hospital career fairs.

**I.A.2 and II.A.3  The “equity gap” actually refers to the difference in success rates between our “targeted” students and our “non-targeted” students, not simply the increase or decrease in the success rates of each of these groups (this is a common misunderstanding across our campus).  Question:  What thoughts or plans have you considered regarding what you might do differently to improve the success rate of our “targeted” populations in particular––*as distinct from efforts with the “non-targeted population”*––to move toward closing this achievement gap?**

Plans:

Looking into offering an introductory course that would cover some of the basic skills or act as a refresher.

Offer tutors with specific knowledge of the clinical courses, through the Student Success Center and utilizing smartthinking online tutoring.

In preliminary discussions around testing for basic math skills and English competency to make sure students are prepared to do well in class.

**Nursing:**

**II.A.1 Please respond more fully to this question.**

Our student population continues to be very diverse. In the targeted student populations success rates for 2012 – 2013 were at 85% and in the non-targeted student population the rate was 93%.

A further breakdown reveals that for Latina/o student enrollment went from 265 in 2010- 2011 to 399 students in 2012 – 2013 and with a dip in the success rate from 85% to 79%.

For Pacific Islander students, enrollment went from 2 students in 2010- 2011 to 20 students in 2012 – 2013 and with a steep climb in the success rate from 0% to 100%.

For Filipino students, enrollment went from 263 in 2010- 2011 to 342 students in 2012 – 2013 and with a the success rate going from 94% to 93%.

African American student enrollment went from 63 students in 2010- 2011 to 42 in 2011 – 2012 to 53 students in 2012 -2013. Success rates showed a sharp rise 2011 – 2012 going from 77% to 89% and then decreasing again to 75% in 2012 -2013.

**II.A.2 The “equity gap” actually refers to the difference in success rates between our “targeted” students and our “non-targeted” students, not simply the increase or decrease in the success rates of each of these groups (this is a common misunderstanding across our campus). What thoughts or plans have you considered regarding what you might do differently to improve the success rate of our “targeted” populations in particular––as distinct from efforts with the non-targeted population––to move toward closing this achievement gap?**

The equity gap for Nursing has gone

from 5 % in 2010 – 2011 with a targeted student population success rate at 88%

4 % in 2011 – 2012 with a targeted student population success rate at 86%

8 % in 2012 – 2013 with a targeted student population success rate at 85%

The equity gap seen does not reflect the actual success rates of our Nursing students – which in fact is much higher. Most of the growth that we are seeing in Nursing is in the introductory/orientation to Nursing that students take before meeting any pre-requisites and only at the early stages when students are still exploring career options.

Regardless the Nursing department continues to look at options for continuing to

* decrease equity gap in both core Nursing structures as well as introductory courses. early identification of at risk students,
* advising students to take Smartthinking online tutoring program for Nursing,
* in class tutoring through student mentors;
* encouraging students use of the skills lab for additional clinical experience,
* additional FT faculty who serve as committed mentors and advisors for students both in theory and at the clinical sites.