

**Biological, Health, Environmental Sciences and Workforce Education Division
(BHES-WE)**

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The BHES-WE division is comprised of the Automotive Technology, Biology, Environmental Studies, Health Technologies, Manufacturing & CNC Technology, Medical Laboratory Technology, and Nursing Departments.

The number of sections offered in the BHES-WE division have decreased in number from 1183 section in the 2008 – 2009 academic year to 975 sections in the 2010 -2011 academic year. Despite this reduction, the division has seen an overall increase in student enrollment to an all time high of 18,391 students served in 2010-2011. Efficient enrollment management allowed us to achieve these numbers, along with faculty dedicated to student success, and strong staff support backing us up. The faculty members were often willing to take students above the normal seat count and then committed to seeing them succeed.

The division has persistently high retention and success rates in both targeted and non-targeted student groups, out-performing the over-all college every year in these numbers. The success rates in under-represented student groups can be credited to resource centers for the students in Biology, Nursing and Environmental Studies, where students can get more hands on experience, practice and exposure to course materials. Externships, internships and job placement opportunities for our students are a feature of many of our CTE programs. In all departments early student intervention, mentoring and counseling by faculty as well as peer tutoring have helped to maintain the success rates and popularity of our programs.

Our CTE programs are all supported by labor reports that show increased job demands in their fields: Auto technicians will see a 7% growth rate from 2008 to 2018; HTEC employment opportunities are projected to grow by 22 – 30%; MLT employment opportunities show a growth rate of 14.3% from 2008 – 2018; in the field of MCNC growth is predicted at 6.1 – 18.5% and in Nursing the growth rate in employment will be 25.7%. The Biology and Environmental Studies departments have both seen sharp increases in enrollment showing a student demand for GE transfer courses, majors courses and pre-requisite courses used for the allied health careers. Biology enrollment has gone from 4177 students in 226 sections in 2008 – 2009 to 5678 students in 197 sections in 2010 - 2011. Environmental Studies enrollment has gone from 3775 students in 255 sections in 2008 -2009 to 4497 students in 251 sections in 2010 - 2011. This data supports the reality that our faculty and staff are persistently doing more with fewer resources.

Areas of immediate concern are the Health Technologies program and the Medical Laboratory Technology program. These programs serve 2180 students and 400 students respectively and are each run by a single full time faculty. This faculty member is responsible for maintaining the program's national accreditation and/or state approval, all

administrative duties, marketing and student recruitment, maintaining laboratory instrumentation, laboratory preparations, and instruction, as well as supervising part time faculty. The demands on the faculty and the lack of staffing in the MLT department have limited the growth of the program, despite an increased student demand. Both these departments are in need of additional full time faculty as well as staff support.

Another area of concern is the B budget. In 2009-2010 with the merging of the Applied Technologies division with the BHES division, the B budget funding for the division was increased by \$16,062.00. The actual operating costs of the division were, however, increased by \$49,987.00. Since then all departments in the BHES-WE division have seen successive years of budget cuts, this trend will eventually impact our ability to foster student success in our programs.

The ability to replenish and replace equipment, stock our classrooms and lab rooms with supplies and technology and thereby make our students competitive in their future educational/occupational goals is extremely vital. The **measure C funds** are essential to achieve these objectives especially in the face of this division's unique reason for decrease in B budget funding.

While the Biology and Environmental Studies departments have shown strong growth, in order to maintain this trend and at the same time grow to even higher levels of student retention and success - staff support is required in the student resource centers. These resource centers are content specific regions where students can go, outside of regular class time, to review course materials, look at specimens, microscopes, models etc., to continue their exposure to scientific content as well as create communities of learning. These centers should be available to our students in the evenings and possibly on weekends.

The BHES-WE division's progress in establishing and assessing student learning outcomes at the course and program level has been outstanding. Departments have had meaningful discussions on student learning objectives & assessments and have reflected on these outcomes. Technology, laboratory, and equipment needs were consistently identified as limiting factors in achieving desired outcomes. The allotment of Measure C funds will go a long way in addressing these concerns.