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Yalonda Sinda

Strategies for Enhancing the Environmental Health Workforce: An Update on the Health of Accredited Environmental Health Degree Programs

Editor's Note: In an effort to promote the growth of the environmental health profession and the academic programs that fuel that growth, NEHA has teamed up with the Association of Environmental Health Academic Programs (AEHAP) to publish two columns a year in the *Journal*. AEHAP's mission is to support environmental health education to ensure the optimal health of people and the environment. The organization works hand in hand with the National Environmental Health Science and Protection Accreditation Council (EHAC) to accredit, market, and promote EHAC-accredited environmental health degree programs. AEHAP focuses on increasing the environmental health workforce, supporting students and graduates of EHAC-accredited degree programs, increasing diversity in environmental health degree programs, and educating the next generation.

This column will provide AEHAP with the opportunity to share current trends within undergraduate and graduate environmental health programs, as well as their efforts to further the environmental health field and available resources and information. Furthermore, professors from different EHAC-accredited degree programs will share with the *Journal's* readership the successes of their programs and the work being done within academia to foster the growth of future environmental health leaders.

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We all know that a well-trained and diverse environmental health workforce is essential to delivering quality environmental health services. But how do we work to ensure that environmental health professionals have the skills necessary to meet increasingly complex environmental health challenges? One answer is to support accredited environmental health degree programs. Since 1999, the Association of Envi-

ronmental Health Academic Programs (AEHAP) has been the support, administrative, and recruitment arm of environmental health degree programs accredited by the National Environmental Health Science and Protection Accreditation Council (EHAC).

AEHAP was founded in response to a major shortage of highly trained environmental health professionals. AEHAP works to increase the workforce and the number of col-

leges and universities offering degrees in environmental health science primarily through various recruitment efforts such as marketing campaigns, exhibiting, and presentations. AEHAP also supports students, faculty, and graduates of EHAC-accredited programs by providing links to funding resources, internships, scholarships, and job openings in environmental health.

EHAC was established in 1967 as a result of recommendations from NEHA committees and other stakeholders working to define the educational needs of sanitarians and the curricula to meet those needs. The purpose of EHAC is to enhance the education and training of students who intend to be environmental health science practitioners/professionals. EHAC has established guidelines that uphold a standard of quality and excellence in accredited programs. The EHAC guidelines are upgraded every six to eight years to ensure that graduates have skills and competencies necessary to address new and emerging environmental health issues and changes in environmental health practice.

EHAC accredited its first undergraduate program in 1969 at East Tennessee State University. Since that time the council has accredited 49 undergraduate and graduate programs in both public and private institutions across the U.S.

EHAC is the only national accreditation organization for baccalaureate and graduate programs in environmental health science. EHAC is run by a 21-member council that includes environmental health practitioners and faculty from EHAC programs. As of June 2014, 31 undergraduate and eight graduate programs are accredited by EHAC. EHAC-

FIGURE 1

Undergraduate Enrollment Trends and Graduation Rates Over 10-Year Period

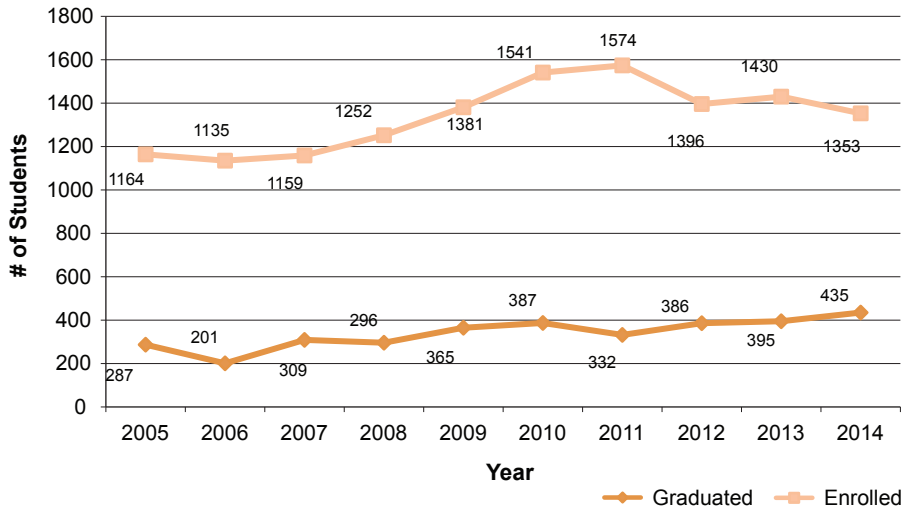
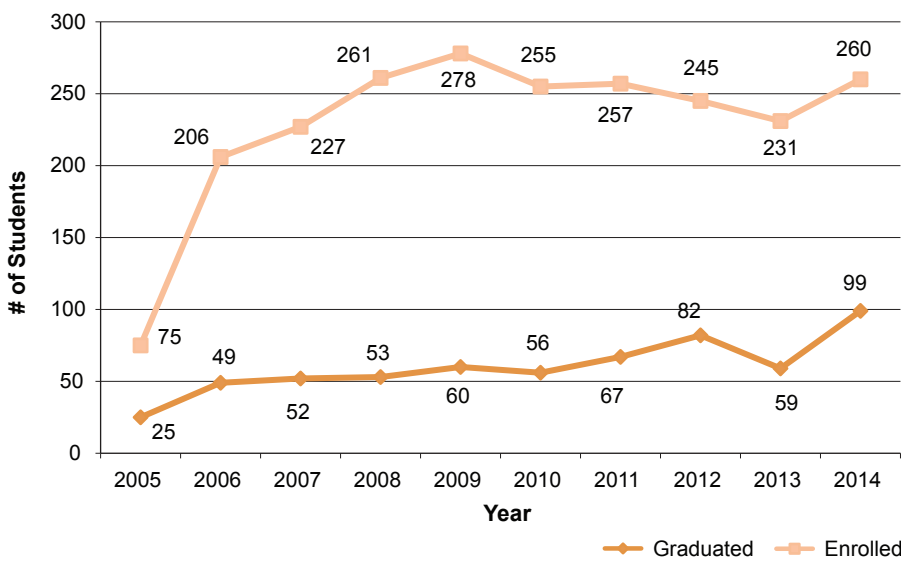


FIGURE 2

Graduate Enrollment Trends and Graduation Rates Over 10-Year Period



accredited programs are recognized as providing the training and preparation necessary to meet many state requirements for environmental health practitioners.

Each year environmental health programs accredited by EHAC are required to complete an annual update survey. This survey covers

topics that will allow EHAC and AEHAP to better understand the health of individual programs as well as the overall strength of EHAC-accredited programs. The survey also helps AEHAP learn how we can best support accredited programs.

The data in the 2013–2014 academic year report represent 40 accredited programs. This includes 32 undergraduate programs and eight graduate programs. In 2013, EHAC gained two undergraduate programs at Central Michigan University and University of Wisconsin, Oshkosh.

This report provides information on student and faculty diversity; the health of individual programs; changes in programs and student recruitment; and enrollment, retention, and graduation rates. Additionally, it includes information on faculty degree requirements, faculty salary information, the origin of international students, public- vs. private-sector employment rates of graduates, outreach strategies, program needs, and suggestions from faculty on how AEHAP can best support their programs. The data in this report are crucial to ensuring a well-qualified and diverse workforce.

Key Findings in the Annual Update of Accredited Programs Report

- Undergraduate enrollment decreased from 1,430 in 2013 to 1,353 in 2014, a 5% decrease (Figure 1).
- For the 2013–2014 academic year, 1,353 undergraduate students and 260 graduate students were enrolled for a total of 1,613 students, which is a decrease of 3% as compared to 1,661 students enrolled in the 2012–2013 academic year (Figures 1 and 2).
- The 2013–2014 undergraduate enrollment rate is just 1% below the 10-year enrollment average.
- Graduate student enrollment increased by 13% from 231 graduates in the 2012–2013 academic year to 260 graduates in 2013–2014. The graduation rate increased by 68% from the 2012–2013 academic year (Figure 2).

Explanations for Increases and Decreases in Enrollment and Graduation Rates

The loss of programs greatly impacts enrollment and graduation rates year to year. Colleges and universities close programs for various reasons such as retiring or departing faculty, college administration decisions, and low student enrollment. AEHAP works to prevent college and university-initiated program closures by writing letters (at the

request of programs) to college administrators expressing the importance of keeping programs intact. Many institutions elect to close programs due to their small size. Most EHAC programs are small programs, making them easy targets for budget cuts. AEHAP educates college administrators on the value of these small programs where students are getting a more intimate learning experience. For programs with the capacity and desire to increase enrollment, AEHAP works with faculty on their recruitment efforts. Some programs are also closed when they are reviewed by EHAC and found to no longer meet EHAC accreditation guidelines. Accredited programs are sometimes put on conditional accreditation status, giving them an opportunity to make improvements needed to meet EHAC standards. If these conditions are not met, EHAC may sometimes elect to close a program. AEHAP does not make accreditation decisions nor can it impact the decisions of EHAC.

Most EHAC faculty stated in the annual report that “word of mouth” was the primary reason for increases in student enrollment in their programs. AEHAP research shows that students are our best recruiters and that many students learn about EHAC programs from talking to their friends. AEHAP supports student recruitment efforts by providing support to student-led environmental health clubs at EHAC programs. Faculty work hard as well to recruit students into their programs.

Decreases in student enrollment are often attributed to students who opt out due to perceived difficulty of math and science classes in EHAC programs. Lack of visibility of environmental health in general also contributes to lower student enrollment as compared to other degree programs.

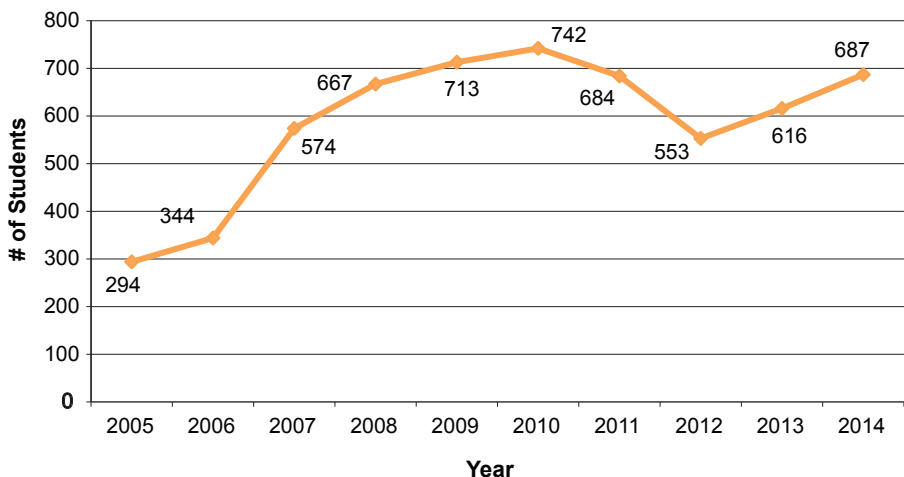
Diversity

The student body of accredited programs is showing an increase in diversity. Currently 43% of students enrolled in EHAC-accredited programs are minorities. This represents an increase of 12% as compared to the previous academic year. Overall diversity has increased by 134% since the academic year 2004–2005 (Figure 3).

Diversity in EHAC-accredited programs has been steadily increasing due to the increase in the number of accredited minority-serving institutions and through past AEHAP grants

FIGURE 3

Accredited Programs Student Diversity Trends



to programs to partially fund student diversity initiatives. Forty three percent of accredited programs have programs or initiatives to recruit a diverse student body. The following details these programs or initiatives.

Retention

Retaining students is crucial to the success of programs and the report tracks the five-year average retention rates of accredited programs. Thirteen of the programs have retention rates equal to or more than 25%. These programs include Bowling Green State University (43%), California State University Northridge (graduate) (45%), Colorado State University (26%), Dickinson State University (37%), East Central University (26%), Eastern Kentucky University (graduate) (47%), Illinois State University (28%), Indiana University-Purdue University Indianapolis (31%), Old Dominion University (graduate) (44%), The University of Findlay (graduate) (32%), University of Washington (51%), Western Carolina University (27%), and Wright State University (34%).

Full Online Degree Programs

Missouri Southern State University (undergraduate), East Carolina University (graduate), The University of Findlay (undergraduate and graduate), and University of Illinois Springfield (graduate) all have full online degree programs.

Online Courses

Twenty-six of the 40 accredited programs offer online courses. Of those that offer online courses, 14 of them offer to anyone other than students registered at their school.

Conclusion: How Can We Support EHAC-Accredited Programs?

The annual report has additional information that may be of interest to people and the full report is made available on the home page of the EHAC Web site at www.ehacoffice.org. You can view more data on the health of programs by downloading a full copy of the report.

The final section of the report asks faculty how AEHAP can best support their program. The top three responses were AEHAP outreach/marketing materials, AEHAP scholarships, and the AEHAP newsletter. Seventy-two percent said AEHAP outreach materials are helpful, 56% said that AEHAP scholarships are helpful, and 53% said the AEHAP newsletter is beneficial.

Environmental health practitioners can best support the education of future environmental health practitioners by running for a position on EHAC; volunteering to serve as a guest lecturer for EHAC programs; sending AEHAP links to employment, scholarship, and internship opportunities that we can share with faculty, graduates, and students; agreeing to serve on an AEHAP work

group or committee when needed; or agreeing to serve as a mentor by sharing your professional journey with EHAC graduates via AEHAP quarterly webinars with EHAC graduates. If any of these opportunities are of interest to you please contact us at info@aehap.org or call us at 206-522-5272.

The work of AEHAP is supported by membership dues and through a coopera-

tive agreement with the Centers for Disease Control and Prevention's National Center for Environmental Health. We appreciate the opportunity to share our great work with readers of the *Journal*. You can learn more about AEHAP and EHAC at www.aehap.org and www.ehacoffice.org. You can also join our e-mail list by sending us a message at info@aehap.org. You can also help spread the

word about environmental health careers by sending our Web site, www.careersenvhealth.com, to members of your network. 🐼

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ACCREDITED ENVIRONMENTAL HEALTH SCIENCE AND PROTECTION PROGRAMS

The following colleges and universities offer accredited environmental health programs for undergraduate and graduate degrees (where indicated). For more information, please contact the schools directly, visit the National Environmental Health Science and Protection Accreditation Council (EHAC) Web site at www.ehacoffice.org, or contact EHAC at ehacinfo@aehap.org.

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