

A photograph of a stone tower on a grassy lawn with trees in the background. The tower is made of stacked stones and has a square cross-section. The background shows a blue sky with some clouds and several large, leafless trees. The text is overlaid on the image.

**A FRAMEWORK TO FOSTER DIVERSITY**

**AT PENN STATE**

**THE COLLEGE OF EARTH AND MINERAL SCIENCES**

**2004-2009 Diversity Strategic Plan Evaluation**

**December 2009**

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## Introduction

In The 2004-2009 Strategic Plan for Diversity: A Commitment To Fostering Diversity, The College of Earth and Mineral Sciences (EMS) outlined its commitment to fostering diversity and equity within the College. A revision of the College's Strategic Plan was completed that recognizes the importance of this challenge by outlining the actions required to achieve three interrelated strategic objectives that were critical for the continuing excellence of the College of Earth and Mineral Sciences:

- To Create the Most Student-Centered College in Penn State History
- To Develop a Diversity and Climate that will Empower Future Generations of Scholars
- To advance the Capabilities and Reputations of the College's Departments and Institutes.

The challenge of developing a diversity and climate that will empower future generations of scholars is both substantial and compelling.

The disciplines within the College of Earth and Mineral Sciences are of critical and enduring interest to society. Yet, there are not enough trained Americans to fill the existing engineering, science and technology positions. This threatens our ability to compete in the global arena, fill the future professorate, enable U.S. commerce, and provide a strong economic future for the nation. African Americans, Hispanic Americans, Native American Indians and persons with disabilities make up two thirds of America's workforce, but they are a small fraction of the workforce in science, engineering and technology. Women frequently out-compete their male peers in high school academics as well as outpacing men in earning college degrees.

For the College of Earth and Mineral Sciences, the under representation of women, African Americans, Hispanic Americans and Native American Indians is particularly pronounced. Historically, our disciplines have had low participation by women and by underrepresented groups. The College of Earth and Mineral Sciences' population is far from reflecting the diversity of our Nation, and State but our numbers are consistently increasing and our diverse students are becoming more integrated into the affairs of the College. Women students are extremely involvement in the student leadership and often elected to positions in student organizations and in many cases women students have organized their own clubs to support their efforts as well as to mentor females in the pipeline. Their involvement in Total Orientation to Earth and Mineral Sciences (TOTEMS) is very evident and most recently their involvement in the solar decathlon house was equally as impressive.

This evaluation outlines the status of each strategy that was proposed in EMS's 2004-09 Strategic Plan for Diversity. While we have made no attempt to answer every questions outlined under each challenges, many of the questions have been answered in responding to the status of each strategy proposed by EMS. It should also be noted that several administrative changes have taken place the College of Earth and Mineral Sciences since the last plan. Both an Interim Dean and Permanent Dean have served as the College Executive. During the College's Strategic Planning process diversity committee was formed to discuss and evaluate the College's diversity efforts. The Current Dean in Fall 07 created the Associate Dean's Office of Educational Equity to provide the College leadership in promoting multiculturalism and to weave diversity throughout the fabric of the college.

## CAMPUS CLIMATE AND INTERGROUP RELATIONS

### Challenge 1: Developing a Shared and Inclusive Understanding of Diversity

#### *A) Defining Diversity*

The College definition of diversity was written by a College Task Force on Diversity, presented to the faculty, and adopted in 2003. It is written as a goal:

*Our ultimate goal is an environment that welcomes supports and allows all individuals to achieve, regardless of differences with respect to age, class, ethnicity, gender, physical ability, race, sexual orientation, spiritual practice or other human differences.*

Past feedback on the diversity plan updates indicated that our definition was inclusive and acceptable. Our definition is very visible and included on the College's publications and website. During the summer 09, Deike Building's entrance was renovated and now sports a beautiful gateway into the College's administrative unit including an assessable ramp. It should be noted that all outside doors into Deike Building have handicap facilities.

***B) Role of the Office of Educational Equity***

The Office of Educational Equity implements the roles outlines in the 2004-2008 documents. The staff:

□ The Associate Dean has been an integral player in developing and contributing to the overall College Strategic Plan as well as the planning and implementation of the Diversity Strategic Plan. The Associate Dean helps develop programs and activities which are central to the mission of the college. The Associate Dean is a member of the college leadership team (Executive Council) and is responsible for the overall management of programs designed to recruit, retain and support outstanding and diverse pools of undergraduate and graduate students in the College of Earth and Mineral Sciences.

Collaborates with students, staff, faculty, department chairs and advising staff, the Office of the Vice-Provost for Educational Equity, Minority Affairs and Community Affairs Office of Admissions, secondary schools, private industry and donors to build a solid infrastructure, develop strong partnerships and create an effective and adaptable strategic plan for program growth and to support efforts to increase the populations of historically underrepresented graduate and undergraduate students.

Provides diversity leadership and direction for College of Earth and Mineral Sciences in student services, working closely with staff, students, the University community and the broader community to recruit and retain an outstanding and diverse pool of students, staff and faculty within in the College of Earth and Mineral Sciences.

Takes a lead role in developing metrics and other modes of assessment to ensure that the diversity and student service programs are addressing and making progress to achieve objectives.

Has designed and implemented a database system for the identifying students.

Communicates the importance of diversity within EMS by meeting regularly with unit leaders, student groups, visiting groups, visiting guest from Industry, government and educational institutions. In addition, the Associate Dean teaches a first year seminar in which diversity is included as a prominent unit.

Works cooperatively with the Office of Vice Provost for Educational Equity, the Office of Graduate Educational Equity, student societies (e.g., AISES, NSBE, SHPE, SWE), and other diversity programs on campus in order to increase the impact on recruitment, retention, and graduation of historically underrepresented minorities in science and engineering disciplines and facilitate admission to graduate school, as well as placement in the public and private sector.

Through the Alumni Coordinator works to utilize GEMS (Graduates of Earth and Mineral Sciences) as a College of Earth and Mineral Sciences Advisory Board on Diversity and Student Services to develop goals and implement strategies for continuous improvement.

- The Director-Recruitment and Retention for Underrepresented Students serves a number of roles including the recruitment and retention of underrepresented student groups at the undergraduate and graduate level, and organizing educational programs for historically underrepresented groups in science and engineering. The Office of Educational Equity (OEE) coordinates efforts to monitor the academic progress of and mentor students in order to positively impact the academic progress of students from underrepresented groups. The office staff is responsible for the implementation and coordination of on-campus programs, represents the College for middle school and high school students and at the community level for underrepresented groups in consultation with Minority Affairs Community Affairs (MACA).

□ The Staff Assistant is a grade 18 and has worked for the University for 10 years. Her office skills and personable approach has enhanced outreach efforts of the Office. She brings an incredible amount of ‘valueaddress’ to the position to the position. As a result, she has taken a major role in planning and executing activities related to student development. Students and faculty alike often seek her advice and counsel in working with students. The Office has made a concerted effort to cross train and fully inform each other of individual projects.

***c) Distribution of Information and Discussion of Initiatives***

The College of Earth and Mineral Sciences is now employing multiple mechanisms for communication and discussion of initiatives and is committed to further enhancing diversity within the college. The infrastructure to support diversity will continue working to advance this notion. For example, EMS has evaluated and has completed a new web site to better communication with internal and external audience’s information related to the College. Diversity philosophy and imitative are very visible and easy to negotiate. In addition, the ***Diversity Committee Roles, Functions and Composition are composed*** of department heads, senior faculty as well as staff and meet at least once a semester. It is chaired by the Associate Dean for Educational Equity and is charged to identify strategies to encourage best practices in developing and practicing cross communications between and amongst administrators, faculty, staff, and students within the College. In addition, The Diversity Council takes an active role in developing metrics and workshops to assess the climate within the College for faculty, staff and students and to gauge progress in achieving diversity objectives,

The Office of Associate Dean for Educational Equity has been in exists for two years, and to date a very deliberate infrastructure is being put into place to assist in fulfilling the diversity mission of the College. Instruments are being developed to help collect the can of information that will help drive the operations of the Office of Educational Equity.

## **Challenge 2: Creating a Welcoming Campus Climate**

The commitment by the leadership of the College of Earth and Mineral Sciences to creating a welcoming campus climate continues to be at the forefront of the Dean's agenda. While the numbers of underrepresented groups are small, traditional surveys and assessments do not guarantee that the advice and evaluations of our faculty, staff and students will be anonymous, the Dean and Associate Dean for Educational Equity take extra measures to meet individually with faculty, staff and students to access the comfort levels. As concerns are identified, appropriate referrals are made. For example, when talking with unrepresented faculty and concerns regarding Promotion and Tenure are raised, referrals are immediately made to consult with the University's Senior Faculty Mentor. In addition, the faculty is strongly encouraged to continuously work closely with the department head to make sure expectations are being met. The Associate Dean then follow-up with additional inquires to make sure the under-represented faculty concerns are being adequately addressed.

The College of Earth and Mineral Sciences is committed to having a climate which is conducive to the success of all. Earth and Mineral Sciences have an elected Ombudsperson as a College-wide effort to facilitate identification and response to climate issues for faculty. The ombudsperson is part of the Dean's executive staff and regularly raise issues related to the promotion of faculty well being within the College. In addition, the Ombudsperson model is being used through the College, each department and EMS's graduate students each have a representative that facilitate and encourage open communication and serves as a vehicle for faculty and students to have their voices heard. Staff of the college has an advisory board that meets regularly to discusses related to College affairs. The College has also implement activities in taking a proactive stance in improving the climate within the College and that all policies and resources are both visible and accessible. This includes:

- Information materials and strong collaborative recruiting and retention links with campus groups, activities, and off-campus groups that promote a sense of community, as a proactive rather than reactive element in recruiting and retaining African-American and Hispanic faculty, staff and students
- Active support of and participation in community building activities for women and underrepresented populations.
- Policy information sheets on issues such as maternity leave, promotion and tenure related to childbirth, spousal hires, and family related services as proactive rather than reactive elements in recruiting and retaining female faculty.
- Support for students who are returning adults and veterans.
- Support for students who identify with LGBT (Lesbian, Gay, Bisexual, Transgender) issues.

## **REPRESENTATION (ACCESS AND SUCCESS)**

### **Challenge 3: Recruiting and Retaining a Diverse Student Body**

Making the College of Earth and Mineral Sciences one of the most student-centered college in Penn State history was one of the three major strategic planning priorities of the College. Concentrated efforts had to be made to increase the diversity of our undergraduate and graduate population to achieve the promise of the College.

#### ***Strategies to Recruit and Retain Undergraduate and Graduate Students from Underrepresented Groups***

The College and each department and institute has identified the issue of recruitment of undergraduates and graduate students, particularly from underrepresented groups, as a key priority. Through rededication and internal and external outreach, the college employed a number of strategies to obtain this goal, including but not limited to:

- Recruitment club consists of responsibility from each department. They meet monthly and plan Recruitment and Retention strategies. A concerted effort is made to commit with elementary and secondary teachers as well as commonwealth campuses
- Outreach activities in the undergraduate area include Geosciences', "Shake, Rattle and Rock," which brings 5<sup>th</sup> and 6<sup>th</sup> graders onto campus to explore Geosciences through hands-on experiential learning, Geography's program with middle school girls and GIS Day, Meteorology's Weather Camp, and Materials Science and Engineering on-going workshop development for WISE Week (Women in Science and Engineering). Across the College, participation by faculty, staff and graduate students in SEEMS (Summer Experience in EMS) demonstrated a powerful commitment of time, energy and resources. The Department of Energy and Geo-Environmental Engineering hosted 6 out of the 11 SEEMS experiences.
- The College's new institute, the Alliance for Earth Sciences, Engineering and Development in Africa (AESEDA), is building partnerships with Historically Black Colleges and Universities (HBCUs). Through the identification of matching research areas and faculty sponsors, student and faculty exchanges are beginning.
- A spring 2004 visit by a team of EMS faculty to Howard University, as part of an agreement with the Office of Graduate Educational Equity and Howard University, is planned to promote exchange of faculty and graduate students and to foster closer collaboration between faculty and graduate students at both institutions. This program will create a win-win partnership and will help create a supportive environment for our minority graduate students.
- The College's efforts to recruit graduate students have multiple facets to ensure success. Through the Office of Graduate Educational Equity, annual graduate recruitment trips are made to the University of New Mexico, New Mexico State University and the University of Texas at El Paso. The College focuses resources at large national venues including SACNAS (Society for the Advancement of Chicanos and Native Americans in Science), AISES (American Indian Science and Engineering Society), SHPE (Society of Professional Hispanic Engineers), and NSBE (National Society of Black Engineers) in order to reach students with undergraduate studies in our disciplines or in majors that could lead into our disciplines.

- Through the Office of Diversity Enhancement Programs and BRIE, the College participates in graduate school fairs at The University of New Mexico, New Mexico State University and University of Texas at El Paso as well as University of Puerto Rico, all Hispanic-serving institutions.
- The Director of Diversity Enhancement Programs annually attends and exhibits at the AISES (American Indian Science and Engineering Society) National Convention. The College advertises in the *Winds of Change Magazine*, in the College issue.
- The College of Earth and Mineral Sciences is a voting member of the GEMS Inc. Consortium (Graduate Degrees for Minorities in Engineering and Science, Inc.). EMS is represented at NACME (National Action Council for Minorities in Engineering), NAMEPA (National Association of Minority Engineering Program Administrators) and WEPAN (Women in Engineering Program Advocates Network) annual meetings and forums.
- Nittany Science Camp for Girls and Girls Utilizing Technology and Science are summer day camp programs designed to keep girls in grades 6-10 engaged in science. Since inception, more than 175 girls have participated in the programs, which provide hands-on learning and exposure to women scientists and engineers. A follow-up plan is in place, which invites past participants to college events and encourages them to follow an educational path of science and engineering.
- EMS is a financial contributor to WISE, Women in Science and Engineering, and the Dean serves as an advisory board member to guide WISE activities.

The accompanying charts outlined the progress of each recruitment strategy.

The College prides itself on collaboration in recruiting and retaining a diverse student body. In addition to the many collaborative activities cited above, we will continue a wide variety of activities to support this objective:

Efforts with Talent Search, Upward Bound Traditional, Upward Bound Math and Science, and McNair scholars plus outreach and education events with CAMP, CSP, and SSS resulted in a “Friends of Academic Advancement Programs” award in 2002 for the College. In 2002, in collaboration with the Upward Bound Math and Science Program, the College of Earth and

Minerals Sciences has developed the SEEMS program (Summer Experience in Earth and Mineral Sciences). In the summer of 2003, twelve 27-hour research experiences were offered and completed over an intensive 5-week program. By all accounts, the program was successful. In November, the SEEMS program was presented at an annual meeting of Trio programs, PAEOPP (Pennsylvania Equal Opportunity Programs), as a best practice in "Integrating a Research Experience into Upward Bound and Talent Search Program Curriculum. Seems continue and the participants continue to benefit for the comprehensive experiences planned for its participants. During summer 2009, 50 students comprised 10 teams that worked with in various EMS laboratories.

Representatives of EMS department continue to build new relation with community agencies in urban areas. Summer 09 the College of EMS faculty and staff worked with Philadelphia Congressmen Fattah Educational Advancement Mobile Science Lab. They presented workshops on solar energy, geography, meteorology, geo-wall, and spatial relationships. The weeklong series was so successful that we've been invited back next summer.

EMS continues to participate in Pre-First Year in Engineering and Science Summer Program. Each summer, 20 first year students have the opportunity to get a jump-start on their education through 6 credits of intensive focus on math, chemistry, physics and communications. Current funding has allowed between 2 and 4 EMS students to participate each summer.

The Director of EMS's Office of Educational Equity currently serves as Chair of the College Council of Directors of Minority Program. AS chair of the council, the EMS is at the forefront of the University in providing the diversity leadership at the collegiate level. The chair works closely with the college directors and the graduate school diversity office to coordinate recruitment events at large national venues to increase exposure, identification of potential graduate students and make exhibiting more economical. This team approach is now used at SACNAS, AISES, NSBE, and SHPE as well as other such meetings. We partner with Admission's Minority Affairs Community Affairs at University Park as well as Philadelphia, Pittsburgh, Harrisburg and New York City.

Collaborations with the Office of Graduate Educational Equity are essential to our diversity efforts in EMS. We are at the forefront of development and support of the initiatives of this office. OGEE is a partner and advisor in our efforts to identify, recruit and retain historically underrepresented graduate students. Our history of increased participation in the SROP program, involvement of faculty, staff and students in the Northeast Alliance, participation of staff, students and financial support in the Chaka Fattah Conference as well as extending our time and services to maximize Penn State's visibility at graduate school fairs.

EMS continues is building partnerships with Historically Black Colleges and Universities (HBCUs). Through the identification of matching research areas and faculty sponsors, student and faculty exchanges are beginning. To enhance graduate recruitment, we have placed emphasis on Ronald E. McNair and Louis Stokes Alliance Minority Participation Programs. Both of these program work intensively with undergraduate preparing them for graduate study in STEM disciplines.

Through the E-Dutton institutes many distance and adult learners take advantage of EMS's course offerings. This outreach programs is very successful and continue to grow at a tremendous pace.

The College of Earth and Mineral Science has made increasing gains in enhancing the numbers of underrepresented students at both the undergraduate and graduate levels. Similarly, there has been an increase in the numbers of female students. The challenge for the next planning cycle is to promote activities by working with the Office of Undergraduate Education to create a community of scholar where shared learning is very visible and valued.

#### **Challenge 4: Recruiting and Retaining a Diverse Workforce**

The College Dean and immediate past Deans have been very deliberate in instructing search committees to identify under-represented (racial and gender) individuals at the beginning of a search process through requests for vitae, personal discussions at national society meetings, and discussions with colleagues. As an outcome of this effort, the College will invite individuals to visit campus as part of our strategic thinking about future hires to promote recruitment and diversity in our seminars.

The challenge for the College of Earth and Mineral Sciences in locating and recruiting faculty and staff from underrepresented groups is enormous. EMS disciplines rank at or near the bottom in terms of the diversity of the PhD populations in science and engineering, and in turn, science and engineering rank at the bottom in terms of all university disciplines.

The College continues to implement that strategies adopted In AY 2003-2004, to recruit and retain a diverse workforce. The strategy for faculty has a number of major elements:

- Recruiting faculty from underrepresented groups was established as a priority for the College as part of the strategic objective “to develop a diversity and climate that will empower future generations of scholars.”
- The College has developed a pool of “opportunity funds,” as a direct match to the opportunity funds provided by the Provost. As a matter of policy, the College began to fully match any funds provided by a department prior to seeking support from the Provost’s opportunity funds.
- The College and its departments adopted a policy of creating the broadest possible advertisements for new positions in order to ensure the broadest possible applicant pool rather than focus on specific specialties. More specific ads tend to have smaller and less diverse applicant pools. Some retirements in critical areas still, by necessity, prompt specific ads but there is

clear recognition that the historical tendency to write narrowly focused, discipline-targeted ads has limited our pool of candidates. Broad advertisements in the College will dramatically increase the size and the diversity of the applicant pool.

- The College is recruiting more actively at the junior level for faculty as an additional mechanism of promoting a diverse applicant pool.
- In initiating a search, search committees and faculty at-large are deliberately identifying, nominating, and contacting potential candidates from underrepresented groups who fulfill the criteria of the search. Recruitment will be an active part of College practice.
- The College has developed a focused “family-friendly” set of policies for faculty and we have adopted a proactive spousal-hire policy designed to enable recruitment.
- The College is acting strategically to expand areas of natural strength and interest that also attract scholars from underrepresented groups. AEsEDA, despite its infancy, is already sending a strong signal which has enabled the College to recruit African-American faculty.
- The College has a representative from the Office of Educational Equity on the University Staff Advisory Council (SAC) along with the EMS Staff Advisory Council.

Geographically, State College and surrounding is not very diverse which make hiring under-represented staff very difficult. As a result, the College is making very slow progress in this area. As a result, it is necessary to make sure that all employees within the College are sensitive to diversity issues, As front line staff, and often ambassadors of our departments and institutes, we want to convey the belief that diversity is good for all of us and better prepares our students for the global society that await them.

## EDUCATION AND SCHOLARSHIP

### Challenge 5: Developing a Curriculum that Fosters Intercultural and International Competencies

#### *Integration of Diversity into the Curriculum*

Research, teaching, and service form the triad that promotes growth and development of the University. As we educate the next group of professionals in the earth and mineral sciences, the curriculum forms the core of that education. Just as important is the consideration of “ways of learning” and the implementation of various methods in imparting that knowledge. Over the years, the faculty senate has supported the offering of both diversity enhanced and Global focused classes. The faculty within the College of EMS continues to increase its offering.

The degree to which diversity is further integrated into the junior and senior curriculum varies across the College. Geography focuses on the social, cultural, economic, and political forces that shape the past and present human landscape, and on the interaction between human and physical processes. The nature of the discipline ensures that diversity is fully integrated into the Geography curriculum, which has over a dozen core and elective courses that focus directly on race, ethnicity and gender, or emphasize diversity issues with respect to other areas of human and environmental geography. The College continues to support multicultural curriculum efforts through five avenues:

- Faculty initiatives to develop curricula based on diversity issues that are an integral part of the subject matter or because of the importance placed on diversity by both the College administration and the Department faculty.
- Capstone experiences, developed through the College’s Center for Advanced Undergraduate Studies and Experience (CAUSE). CAUSE supports innovative curricula developments that are open to any programmatic area. However, preference

is given to those projects that promote multicultural and international education. Particular emphasis is placed on efforts that include student travel abroad.

- Service learning. Professor Lucky Yapa's Philadelphia project is a key example of a program that promotes education and scholarship that supports multicultural efforts. The service learning focus is being expanded by the Department of Geography.
- The development of international collaborative teaching projects and programs. The College established collaborative teaching project with universities in South Africa during 2003, and through AESEDA collaborative teaching with other African universities will be expanded. The College also proposes an International Internship Program in Materials (Department of Materials Science and Engineering) for juniors and seniors in collaboration with a host of universities outside of North America.
- The College has established a task force to promote a systematic College-wide approach to the new requirements for U.S. Cultures and International Cultures. We believe that we can substantially enhance the opportunities to foster intercultural and international competencies for science, engineering, and social science students.

In the accompanying chart, an update of progress is providing for each class proposed by the college.

## **INSTITUTIONAL VIABILITY AND VITALITY**

### **Challenge 6: Diversifying University Leadership and Management**

#### ***Involvement of Unit Leaders in Diversity Efforts.***

Traditionally, the College of Earth and Mineral Sciences has a relatively small executive team which has been dominated by males. In effort to diversify the College leadership the current Dean created an Office of Educational Equity headed by an Associate Dean. This addition clearly sends a message of the elevation and importance of diversity within the

college to help fulfill its vision, mission and objectives related to diversity. In addition, opportunities to hire institute directors, who join the ranks of the EMS executive council, and department heads, have presented the opportunity to develop a more diverse leadership team. This has included the College's first female administrator (Director of the Earth and Environmental Systems Institute), and the College's first African-American department head (Department of Energy and Geo-Environmental Engineering).

The College of Earth and Mineral Sciences continues to identify ways and support staff and faculty from women and underrepresented groups who have administrative aspirations or potential. The Dean and executive leadership continues to support faculty who are interested in participating in the Administrative Fellows program or CIC leadership programs. Unit leaders play a key role in accomplishing the College's diversity goals. For example, department heads are responsible for naming the members of the EMS Diversity Council and for promoting Council objectives within each institute and department. Unit leaders have developed key fund-raising objectives related to diversity. They are also actively working to improve our capabilities to recruit and retain students from under-represented groups. Each unit has set aside funds to support recruitment of graduate students from underrepresented populations. Our strategic goals, and the actions required to achieve them, are topics of frequent discussion at EMS executive council meetings. EMS leaders will remain as active participants in all of our diversity efforts.

#### **Challenge 7: Coordinating Organizational Change to Support Our Diversity Goals**

Diversity is fully addresses in chapter three of the College-wide strategic objectives. This objective, Enhancing the Diversity of the College to benefit from the Expanded Richness of Thought and Experiences is fully addresses in the College's Strategic Plan (2009-10\_\_2013-14) entitled "Preparing the Next generation of Earth, Energy and Materials Scientists and Engineers. " As indicated earlier in Strategic Challenge three it is noted that after careful consideration,

the College's executives decided to elevate diversity within the College. In fall 07, an associate Dean for Educational Equity was hired to coordinate organizational change to support our diversity goals. Over the past two years time has been spend developing an infrastructure for diversity. The College as articulated in its 2004 Strategic Plan for Diversity was working on accomplishing its goals and objectives but it made sense to create an independent office to lead these efforts for the college. In addition, diversity initiatives and programs are now, and will continue to be, a required part of the individual unit strategic plans of every department and institute within the College.

## CONCLUSIONS

The College has accomplished much during the last five years. We intend to use that growth and development as a foundation to continue to grow and develop. As we complete this cycle and move into the next strategic planning we in the College of Earth and Mineral Sciences plan to exhibit behavior as illustrated in “A Peacock in the Land of Penguins”:

An attitude that is:

Open to new ideas  
willing to listen  
eager to learn  
desirous to grow  
and flexible to change

Programmatic Evaluation of the College of Earth and Mineral Sciences 2004-2009 Strategic Plan for Diversity

2004 Proposed Strategic Actions

Current 2009 Status

Comments

Challenge 1: Developing a Shared and Inclusive Understanding of Diversity		
<p>To define an operational Definition to diversity that is inclusive and with serve as the foundation of diversity planning for the EMS.</p>	<p><i>EMS's definition of diversity "To create an environment that welcomes, supports and allows all individuals to achieve, regardless of differences with respect to age, class, ethnicity, gender, physical ability, race, sexual orientation, spiritual practice or other human differences".</i></p> <p>The College has incorporated the importance of diversity in its verbal and oral communication to faculty, staff, students, and both internal and external stakeholders. As we prepared the next generation of scientist and professional workers for the labor markets we know they must be on the cutting edge and reflect a global society.</p>	<p>Comments from previous submitted diversity updates have complemented EMS on such an inclusive definition.</p> <p>To start early, all faculty teaching the first year seminar have been informed and encouraged their students to participate in Dr. Sam Richards "Race Dialogues". In addition, staffs from the Office of Educational Equity have offered to talk about the value at first year seminar classes.</p>
<p>To include the Director of the Office of Diversity Enhancement Programs as a member of the Executive Council to enable discussion and promote</p>	<p>In Fall 2007, the Dean hired an Associate Dean of Educational Equity and provided her with an independent office. The primary objectives of the Office is to :</p> <ul style="list-style-type: none"> <li>➤ Assist in weaving diversity throughout the fabric of the college</li> <li>➤ Work extensively with under-represented minority</li> </ul>	<p>The Associate Dean has created fully functioning office with a staff Assistant and a Director of Recruitment and Retention of Underrepresented students. The staff has developed an infrastructure to support the activities of the Office, including but not limited to:</p>

<p>progress on diversity objectives. In this capacity, the Director will also have a stronger role in overall management and coordination among departments and institutes</p>	<p>students helping them obtained their desired degrees</p> <ul style="list-style-type: none"> <li>➤ Create meaningful partnerships and networks with HBCSs and HSIs throughout the country</li> <li>➤ Oversee recruitment, retention, professional development, leadership and graduation of under-represented students enrolled in the College of Earth and Mineral Sciences.</li> <li>➤ Administrative and fiscal responsibility for the Office.</li> </ul>	<p>Tracking Grid to document the progress of each student by Name</p> <p>First year interview schedule</p> <p>Contact Sheets for recording sensitive conversation</p> <p>File Folders on all graduate and undergraduate students</p> <p>File folders for all major contacts including industry, Partnerships and correspondences</p> <p>Support letters for faculty proposals and grants</p> <p>Quarterly Budget Reports</p>
<p>To complete an extensive redesign of the College web page. Although all elements of the College's policies and plans are available on the web, currently access requires too much time and effort. The College is therefore performing a complete redesign of our web page to ensure that diversity and climate are a prominent element of the College's home page, and that the</p>	<p>In Fall 2009, EMS completed the restructuring of the web site. The Unit Leaders are reviewing their pages for accuracy and as soon as the entire local site have been approved, the new site will be up and running. Diversity is very prominent and can be easily accessed from the home page.</p> <p>The Staff Assistant for EMS's Office of Educational Equity was on the Web Page Reconstruction Committee.</p>	<p>The web site location is <a href="http://www.ems.psu.edu/">http://www.ems.psu.edu/</a></p> <p>The Office of Educational Equity has control over its site to add new informational when appropriate.</p>

<p>home page is a gateway to all of our policies and plans, as well as to the University and surrounding community.</p>		
<p>To reinstituted the elected position of Ombudsperson as a College-wide effort to facilitate identification and response to climate issues for faculty and staff.</p>	<p>EMS's elected faculty Ombudsperson is Dr. Alan Taylor, Associate Professor of Geosciences. At the Faculty meeting, there is always an agenda item where he is able to report to the faculty. In addition, the staff and graduate students have ombudspersons also.</p>	<p>The faculty ombudsperson is part of the Dean's Executive Council and attends weekly meetings.</p>
<p>To develop an ombudsperson role for students within each department, with formal training provided for each representative.</p>	<p>Each of EMS five departments has elected and/or appointed student ombudspersons at the graduate student level.</p>	<p>The college's faculty ombudsperson has agreed to meet with the graduate student ombudsperson to help plan strategies to solve problems that might come up during their graduate studies.</p>
<p>To utilize the EMS Diversity Council representatives and ombudsperson roles to focus on early detection of issues, prior to having them become serious issues.</p>	<p>EMS Diversity Committee meets at least once a semester. The Committee also host workshops based on the needs of the college, for example for the last two years workshops have included,</p> <ul style="list-style-type: none"> <li>➤ Information related to International students, and faculty</li> <li>➤ Ice-Cream Social to meet the Dean</li> </ul>	

<p><b>Challenge 3: Recruiting and Retaining a Diverse Student Body</b></p>																																																																	
<p>To provide 14 graduate teaching assistantships (28 semesters) to support recruitment of African-American, Hispanic-American and Native-American graduate students. In identifying qualified students, each department will utilize these resources to recruit students.</p>	<p>The Associate Dean for Graduate Education and Research has utilized the graduate Bunton-Wallers and other scholarship dollars to support graduate teaching Assistantships for under-represented minorities.</p> <p>In the student's acceptance letter, a multiyear funding packet is outlined so the prospective student is fully aware of funding sources. At the end of each Spring semester, the graduate officers send a report to the Associate Dean detailing the number of applicants offers and admits by race.</p> <p>The departmental Graduate Officers meeting each semester with the Associate Deans for Graduate Education and Research and Associate Dean for Educational Equity.</p>	<table border="1"> <thead> <tr> <th></th> <th><u>NAI</u></th> <th><u>Blk</u> <u>AM</u></th> <th><u>Asian/</u> <u>Pac</u> <u>Am</u></th> <th><u>Latino/</u> <u>Hispanic</u> <u>/Puerto</u> <u>Rican</u></th> <th><u>White</u></th> <th><u>International</u></th> </tr> </thead> <tbody> <tr> <td><u>Year</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fall 2002</td> <td>0</td> <td>6</td> <td>5</td> <td>2</td> <td>202</td> <td>190</td> </tr> <tr> <td>Fall 2003</td> <td>1</td> <td>5</td> <td>6</td> <td>5</td> <td>208</td> <td>193</td> </tr> <tr> <td>Fall 2004</td> <td>1</td> <td>4</td> <td>9</td> <td>8</td> <td>215</td> <td>193</td> </tr> <tr> <td>Fall 2005</td> <td>2</td> <td>9</td> <td>9</td> <td>11</td> <td>214</td> <td>206</td> </tr> <tr> <td>Fall 2006</td> <td>1</td> <td>8</td> <td>9</td> <td>13</td> <td>198</td> <td>177</td> </tr> <tr> <td>Fall 2007</td> <td>1</td> <td>9</td> <td>7</td> <td>12</td> <td>195</td> <td>150</td> </tr> <tr> <td>Fall 2008</td> <td>1</td> <td>16</td> <td>9</td> <td>12</td> <td>213</td> <td>276</td> </tr> </tbody> </table> <p>Graduate Enrollment in EMS for FA 2005 through FA 2008</p>		<u>NAI</u>	<u>Blk</u> <u>AM</u>	<u>Asian/</u> <u>Pac</u> <u>Am</u>	<u>Latino/</u> <u>Hispanic</u> <u>/Puerto</u> <u>Rican</u>	<u>White</u>	<u>International</u>	<u>Year</u>							Fall 2002	0	6	5	2	202	190	Fall 2003	1	5	6	5	208	193	Fall 2004	1	4	9	8	215	193	Fall 2005	2	9	9	11	214	206	Fall 2006	1	8	9	13	198	177	Fall 2007	1	9	7	12	195	150	Fall 2008	1	16	9	12	213	276
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Comment [koh11]:

<p>To continue to recruit and retain under-represented undergraduate students.</p>	<p>The College enrollment for undergraduates has increased gradually over the past five years. For international, under-represented undergraduates and majority students have all increased. The only group that shows a drop is Native American Indians.</p> <p>Female undergraduate enrollments have also increased.</p>	<table border="1" data-bbox="1050 423 1648 716"> <thead> <tr> <th></th> <th>American Indian</th> <th>Black/African Americans</th> <th>Asian</th> <th>Hispanic</th> <th>White</th> <th>International</th> </tr> </thead> <tbody> <tr> <td><b>FALL</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2004</td> <td>3</td> <td>31</td> <td>20</td> <td>19</td> <td>813</td> <td>20</td> </tr> <tr> <td>2005</td> <td>2</td> <td>32</td> <td>30</td> <td>24</td> <td>852</td> <td>16</td> </tr> <tr> <td>2006</td> <td>1</td> <td>36</td> <td>26</td> <td>29</td> <td>915</td> <td>31</td> </tr> <tr> <td>2007</td> <td>1</td> <td>44</td> <td>27</td> <td>32</td> <td>950</td> <td>51</td> </tr> <tr> <td>2008</td> <td>1</td> <td>42</td> <td>29</td> <td>31</td> <td>1063</td> <td>76</td> </tr> </tbody> </table> <p data-bbox="1115 727 1583 789" style="text-align: center;">Under-graduate Students at University Park from FA 2004 through FA 2008</p> <table border="1" data-bbox="1060 868 1638 1047"> <thead> <tr> <th></th> <th>Female</th> <th>Male</th> </tr> </thead> <tbody> <tr> <td><b>FALL</b></td> <td></td> <td></td> </tr> <tr> <td>2005</td> <td>246</td> <td>580</td> </tr> <tr> <td>2008</td> <td>282</td> <td>766</td> </tr> </tbody> </table> <p data-bbox="1077 1058 1621 1118" style="text-align: center;">Undergraduate Student Enrollment by gender in EMS for FA 2005 and FA 2008</p>		American Indian	Black/African Americans	Asian	Hispanic	White	International	<b>FALL</b>							2004	3	31	20	19	813	20	2005	2	32	30	24	852	16	2006	1	36	26	29	915	31	2007	1	44	27	32	950	51	2008	1	42	29	31	1063	76		Female	Male	<b>FALL</b>			2005	246	580	2008	282	766
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<p>To development a more sophisticated tracking system of enrolled students.</p>	<p>EMS's Office of Educational Equity has put in place a tracing grid that documents every under-represented minority using the following indicators:</p> <ul style="list-style-type: none"> <li>➤ Name</li> <li>➤ Home Address</li> <li>➤ Cell and land phone numbers</li> <li>➤ Email Address</li> <li>➤ Student Number</li> <li>➤ Gender</li> <li>➤ Ethnicity</li> <li>➤ Date Enrolled</li> <li>➤ High School</li> <li>➤ HS GPA</li> <li>➤ SAT Scores</li> <li>➤ PGPA (Penn State)</li> </ul> <p>Each Spring both current and cumulative GPA is added to the grid. We also not any special comments like if the students received any special awards, traveled abroad, interned, etc</p>	<p>The Office of Educational Equity has devised a tracking grid to track each student by name by semester. The idea is to collect the kind of data that will drive and inform the undergraduate recruitment process.</p>
<p>To increase the budget for Diversity Enhancement Programs will again be doubled.</p>	<p>The Dean established an Office of Educational Equity with an independent budget. The staffing includes a senior administrator, Director of Recruitment and Retention, staff Assistant (Grade 18), and a work study/wage payroll student.</p>	<p>The Dean has made monumental strides in making the Office of Educational Equity a permanent division within the College. First a foremost, A permanent space was allocated for office with appropriate renovations to create a viable space. Permanent Standing Staff lines on were created to implement the job functions of the office positions.</p>

		<p>A permanent budget line was allocated to the Office of Educational Equity. Prior to this allocation there was no stand alone office with budget lines attached? Staff plus operational budget accounts for more than a tripling of the permanent budget.</p>
<p>To hire a new recruiter/advisor for our new Student Center. This will enable every undergraduate in the College to have an assigned faculty advisor and an assigned formal advisor so that the College can take an even greater interest in the success of our students.</p>	<p>Fall 2007, the Office of Undergraduate hired a recruiter/advisor for the Ryan Student Center. The advisors form the nucleus of the College's recruitment club. Membership also includes a departmental under-graduate coordinator and the Director of Recruitment and Retention for Underrepresented Students from the Office of Educational Equity.</p>	<p>The Recruitment Clubs meets monthly where members share ideas, proposed and actual activities and implement co-sponsored activities.</p>

<p>To develop events that promotes interaction of our students with successful faculty role models. We propose this activity specifically for all graduate students with potential interest in academia, but the College intends to ensure prominent involvement of female faculty and faculty from underrepresented groups as role models.</p>	<p>EMS's administrators and students have collaborated to sponsor a number of events that promote interactions between students, administrators, faculty, staff and researchers. The students sponsor a Casino Night, lunch for faculty and staff at Irvin Hall, Total orientation for Earth and Mineral Sciences (TOTEMS). The College sponsors EMEX (Earth and Mineral Sciences Exposition), various receptions, etc</p> <p>In addition, the Office of Educational Equity sponsors a monthly "Talking Across EMS Luncheon" where women faculty and graduate students have lunch together to meet, network and discuss issues related to research, balance of home and the academy, etc.</p>	
<p>To work with GEMS as they develop a diversity enhancement activity in which alums provide teams of successful role models in all of the EMS professions as support and encouragement for our students.</p>	<p>GEMS are the advisory board for the College and are very interested in diversity issues. The Associate Dean for Diversity meet with GEMS during each of its campus's meeting. In addition, when the Office of Educational Equity sponsored, a GEM member met the EMS team and sponsored a workshop for the grade school students and parents</p>	<p>The GEMS Board is made up of several female alums and one African American male alum. They are very active and are interested in being update at their regular meeting on diversity issues.</p>

<p>To create a pipeline program for involvement of African-Americans in Geosciences. AESEDA has developed a proposal seeking more than one million dollars to support this initiative.</p>	<p>The Department of Geo-Sciences has a formal partnership with Fort Valley State University (GA). The agreement spells out the 3/2 program for the Cooperative Development Energy Program (CDEP) students. The program will be based on a 3-2 program between HBCUs and Penn State in which students enroll in a BS/MS program with the BS completed at the HBCU, and the students begin to work toward their MS degree in their senior year at Penn State. During the Summers, CDEP 9<sup>th</sup> Grader visit Penn State's Geosciences department.</p> <p>To date we have recruited 6 students from Fort Valley. Four received BS in Geosciences and two of them continued on to the graduate program. 1 student is still matriculating and should graduate Summer 2010. 1 student dropped out of the program</p> <p>During February a team of faculty and administrators visit Fort Valley for its "Energy Day". As a result of the many positives with Fort Valley, they have also become partners in the Africa Array Programs. Over the past two summers, five students have participated in the AfricaArray program with all of them participating in the SROP/AfricaArray Program.</p>	<p>The Office of Educational Equity staff has spoken to the CDEP students both at Fort Valley and with the 9<sup>th</sup> graders when they make their annual visit to Penn state. During their visit, the Department of Geosciences planned a full visit for the students to learn more about geosciences. During summer 2008, the student went to Penn's Cave and summer 2009 they went to Indian Caves.</p> <p>The Office of Educational Equity also support two Fort Valley alums to talk to the Fort Valley 3/2 student about transiting to research institutions to complete the BS in either geosciences or petroleum Engineering.</p> <p>The Director of EMS's Diversity Recruitment and Retention meet on a regular basis with Fort Valley student as a small group to talk with them about their progress.</p>
<p>To work collaboratively with Earth and Environmental Systems Institute (EESI), to</p>	<p>The College has development a number of collaborations with several MSIs through various venues. They include but are not limited to the following:</p>	<p>Many of our SROP participants matriculate at one of our partnering schools. The SROP/AfricaArray students almost always come from one of its partnering institutions.</p>

<p>developed partnerships with Minority serving institutions to encourage students to participate in outreach activities, developed a summer undergraduate research program that has been particularly successful in attracting diverse participants</p>	<p>Fisk University Howard University Florida A&amp;M University Tuskegee University</p> <p><b>AfricaArray:</b></p> <p>Ft Valley State University North Carolina A&amp;T University of AZ University of California @ Northridge University of Texas @ El Pas</p> <p><b>Big Ten Recruitment Caravan</b></p> <p>Southern California Swing University of California @San Diego @ Santa Barbara</p> <p><b>Southern Tour</b></p> <p>Dillard University (LA) Grambling University (LA) Jackson State University (MS) Southern University (LA) University of New Orleans (LA) Xavier University (LA)</p>	<p>Our philosophy is to identify institutions where we can form institutional relations where faculty will start referring their best students to us for research and graduate study.</p> <p>We are already beginning to see evidence of this. Once we bring students for SROP, we strongly encourage the students to share their research with their peers, hang their posters in very positions within their department, and talk to their faculty about their summer experiences.</p> <p>We also provide students with information on how to receive a Penn state graduate application fee waiver.</p> <p>As more and more faculty at MSIs hears of the experiences their students are having as part of SROP, they will want their best students to complete their graduate studies within the EMS.</p>
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	<p><b>University of Puerto Rico</b></p> <ul style="list-style-type: none"> <li>@Mayaguez</li> <li>@Rio Piedras</li> <li>@ Bayamon</li> <li>@Ponce</li> <li>@ Humacao</li> </ul> <p>Estes University (Puerto Rico)</p>	
<p>To promote the successes of our women faculty and faculty from underrepresented and women groups to ensure ready access to role models and strong evidence for successful careers in our disciplines.</p>	<p>The College's Associate Dean for Educational Equity participate in the meeting for new faculty. There she informs them of the Senior faculty Mentor and her role in helping new faculty understand the Penn State culture and what it takes to be promoted and Tenured at Penn state. The Office of Educational equity instituted a "Talking Across EMS Luncheon Series". There is no formal agenda except for female graduate students and faculty of all ranks in all of EMS's departments to informally get together and share information. Often time relationships develop.</p>	<p>At most of the "Talking Across EMS Series" female faculty and graduate students self select dates to sign to attend the discussion luncheons. Normally there are approximately between 8-12 participants at each monthly meeting. We have had requests from some former participant to attend multiple times.</p> <p>During the summer we sponsor an ice cream social to bring the staff together to meet the college leadership. Staffs also are encouraged to participate in TOTEMS and standing on college committees.</p>
<p>To work collaboratively with AESEDA to provide a wide variety of opportunities that bring together African,</p>	<p>The Office of Education has partnered with AESEDA from the start. Within months of her arrival, The Associate Dean for Educational Equity invited AESEDA's Research Associate to accompany her to the Southern CIC</p>	<p>Spring 2010 AESEDA will host its first full semester course in South Africa. Parks, and People will be taught by Dr. Neal Brown (A PSU Alum and a Jamaican), Research Associate with AESEDA.</p>

<p>African-American, and Hispanic communities as a part of educational and research activities of the institute.</p>	<p>Recruitment Trip. Since Jackson State University is one of the institutions AESEDA has identified as a partner, the Research associate was able to visit the Earth Science Department. Since that time we have had students from Jackson State participate in the College's SROP Africa Array Program, Geosciences Hydrology Program, and AESEDA's Jamaica sustainability Village Community Project.</p> <p>Summer 2009, a multicultural teams of students (3 W Males, 1 AA M ale and 1 AA Female) visited Jamaica along with 2 students from Jackson State (1 AA Male/1 Latino Female) to work with the participants of the sustainability village..</p>	<p>Dr. Brown also conceived and continues to implement the Jamaica's sustainable Village Project. On</p>
<p>To continue our collaboration with Howard University. Spring 2004 a visit by a team of EMS faculty to Howard University, as part of an agreement with the Office of Graduate Educational Equity and Howard University, was very successful is planning a win-win relationship with</p>	<p>The relationship with Howard University is continuing to Blossom. Spring 2009, a group of students from Howard participated in the Atmospheric Sciences Conference. The College efforts were led by Dr. Anne Thompson, Professor of Meteorology. We have established a great relationship with Dr. Greg Jenkins, Chair of Howard's Physics department.</p>	<p>Even though there is no formal written agreement between Howard University and EMS, we continue to partner on several projects and share membership in various consortiums.</p>

<p>Howard. Howard University is also a member of the Alliance for Earth Sciences, Engineering and Development in Africa and AESEDA is working to develop additional HCBU partners.</p>																		
<p>To support, at the rate of \$300 per student, graduate student participation in each of the SEEMS experiences. In collaboration with the Upward Bound Math and Science Program, the College of Earth and Mineral Sciences has developed the SEEMS program (Summer Experience in Earth and Mineral Sciences).</p>	<p>EMS received a grant from Shell to help sponsored the SEEMS program. We have been able to provide each graduate student who requested it a stipend of \$1000. Each year a representative of Shell participate in the judging of the SEEMS Project.</p> <p>Many of the SEEMS Students make a commitment during the 9<sup>th</sup> grade to attend at least three summers at Penn State. The leadership of the Upward Bound Math and Science Program work in concert with EMS to help form student teams in accordance to the EMS faculty requests.</p> <p>The SEEMS Students have the opportunity to participate in a multicultural intergenerational research team. For many of the high school this is their first opportunity to work so closely with an international researcher.</p>	<p>As of Fall 2008, 22 SEEMS students were enrolled in eight of Penn State's academic colleges.</p> <p style="text-align: center;">Fall 2008 UBMS SEEMS Students UP Enrollment all semesters</p> <table border="1" data-bbox="1052 797 1650 875"> <thead> <tr> <th>EMS</th> <th>BA</th> <th>Com</th> <th>DUS</th> <th>IST</th> <th>HHD</th> <th>LA</th> <th>SC</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>4</td> <td>1</td> <td>8</td> <td>1</td> <td>2</td> <td>3</td> <td>1</td> </tr> </tbody> </table> <p>Penn State yielded about 25% of the UBMS 2006 Cohort</p>	EMS	BA	Com	DUS	IST	HHD	LA	SC	2	4	1	8	1	2	3	1
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<p>To assist in enhancing EMS department natural reputations within Minority Serving Institutes (MSI)</p>	<p>Having the Office of the Associate Dean for Educational Equity has already help to strengthen ties with partnering institutions. The additional financial and staff resources have helped us to promote our excellent departments to students throughout the country.</p>	<p>The College departments are all ranked within the top ten of their professions. As a result the faculty has developed several partnerships over the past few years.</p> <p>Elements of all five academic departments in the College of Earth and Mineral Sciences are ranked in the top ten nationally to include:</p> <ul style="list-style-type: none"> <li>➤ <b>Geography</b>, Ranked #1, Research-Doctorate Program, National Research Council <ul style="list-style-type: none"> <li>○ <b>Geochemistry</b> – Ranked #2, U.S. News and World Report</li> <li>○ <b>Geology</b> – Ranked #3, U.S. News and World Report</li> </ul> </li> <li>➤ <b>Petroleum and Natural Gas Engineering</b> – Ranked #5, U.S. News and World Report</li> <li>➤ <b>Earth Sciences</b> – Ranked #7, U.S. News and World Report</li> <li>➤ <b>Materials Science and Engineering</b> – Ranked #10, U.S. News and World Report (Best Graduate Schools); Ranked #8, U.S. News and World Report (Undergraduate Engineering Specialties)</li> </ul> <p>Although meteorology and atmospheric science programs across the United States are not officially ranked, The</p>
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		Department of Meteorology at Penn State is one of the oldest and largest in the nation. Meteorology attracts a large number of students from out-of-state, and has the largest completely student-run Campus Weather Service in the United States
<b>Challenge 4: Recruiting and Retaining a Diverse Workforce</b>		
To aid in the Recruiting of faculty and/or staff from underrepresented groups was established as a priority for the College as part of the strategic objective “to develop a diversity and climate that will empower future generations of scholars.”	<p>Overall the College was successful in slightly increasing its minority faculty from 14.4% in AY 2005-2006 to 18% in 2008-2009. These numbers represent an increase in Asian American full professors, and an increase in both Asian and Hispanic Assistant Professors. There was a loss of 1 African American at Professor, Associate and Assistant faculty levels.</p> <p>The Dean continues to encourage each search committee to include under-represented minorities in each hiring pool and given serious consideration. Since there is hiring freeze currently, departments who are planning to hire once the freeze has been lifted encouraged (to get a sense of who is in the pool) to bring in interested “diverse” faculty candidates for seminar talks, workshops, etc. (see below)</p>	

FACULTY					
	Full Prof	Assoc Prof	Assist Prof	Inst	Totals
Am Ind	0 (0%)	0 (0%)	0 (0%)	0 (0%)	<b>0 (0%)</b>
Af AM	1 (1.4%)	1 (2.3%)	1 (1.4%)	0 (0%)	<b>3 (1.2%)</b>
AS AM	10 (13.5%)	5 (11.6%)	15 (21.1%)	5 (8.8%)	<b>35 (14.3%)</b>
Hisp	0 (0%)	1 (2.3%)	4 (5.6 %)	1 (1.8%)	<b>6 (2.4%)</b>
<b>Subtotal</b>	<b>11 (14.9%)</b>	<b>7 (16.3%)</b>	<b>20 (28.2%)</b>	<b>6 (10.5%)</b>	<b>44 (18.0%)</b>
White	63 (85.1%)	36 (83.7%)	51 (71.8%)	51 (89.5%)	<b>201 (82.05)</b>
<b>Totals</b>	<b>74 (100%)</b>	<b>43 (100%)</b>	<b>71 (100%)</b>	<b>57 (100%)</b>	<b>245 (100%)</b>

Faculty by ethnicity for AY 2008-2009

	Full Prof	Assoc Prof	Assist Prof	Inst	Totals
Am Ind	0 (0%)	0 (0%)	0 (0%)	0 (0%)	<b>0 (0%)</b>
Af AM	2 (2.9%)	2 (5.0%)	2 (3.0%)	0 (0%)	<b>6 (2.6%)</b>
AS AM	6 (8.6%)	7 (17.5%)	9 (13.6%)	1 (1.9%)	<b>23 (10.0%)</b>
Hisp	0 (0%)	0 (0%)	3 (4.5%)	1 (1.9%)	<b>4 (1.7%)</b>
<b>Subtotal</b>	<b>8 (11.4%)</b>	<b>9 (22.5%)</b>	<b>14 (21.2%)</b>	<b>2 (3.8%)</b>	<b>33 (14.4%)</b>
White	62 (88.6%)	31 (77.5%)	52 (78.8%)	51 (96.2%)	<b>196 (85.6%)</b>
<b>Totals</b>	<b>(100%)</b>	<b>(100%)</b>	<b>(100%)</b>	<b>(100%)</b>	<b>(100%)</b>

Faculty by ethnicity for AY 2005-2006

	<p>The College has been somewhat successful in hiring female staff.</p>	<table border="1" data-bbox="1052 350 1556 813"> <thead> <tr> <th>Class</th> <th>Female</th> <th>Male</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Dean</td> <td></td> <td>1</td> <td><b>1</b></td> </tr> <tr> <td>Unit Leaders</td> <td>2 (20%)</td> <td>8 (80%)</td> <td><b>10</b></td> </tr> <tr> <td>Staff</td> <td>92 (69.7)</td> <td>40 (30.3)</td> <td><b>132</b></td> </tr> <tr> <td>Tech</td> <td></td> <td>3 (1005)</td> <td><b>3</b></td> </tr> <tr> <td><b>Totals</b></td> <td><b>94 (64.4%)</b></td> <td><b>52 (35.6%)</b></td> <td><b>146</b></td> </tr> </tbody> </table> <p data-bbox="1052 821 1640 886">Executive administrators, academic, staff and tech employees by Gender for AY 2008-2009</p>	Class	Female	Male	Total	Dean		1	<b>1</b>	Unit Leaders	2 (20%)	8 (80%)	<b>10</b>	Staff	92 (69.7)	40 (30.3)	<b>132</b>	Tech		3 (1005)	<b>3</b>	<b>Totals</b>	<b>94 (64.4%)</b>	<b>52 (35.6%)</b>	<b>146</b>
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<p>To cost share the pool of “opportunity funds,” as a direct match to the opportunity funds provided by the Provost. As a matter of policy, the College began to fully match any funds provided by a department prior to seeking support from the Provost’s</p>	<p>The Dean has committee to cost sharing the salary and start up cost for under-represented faculty hired.</p>																									

<p>opportunity funds.</p>		
<p>To establish and/or adopted a policy of creating the broadest possible advertisements for new positions in order to ensure the broadest possible applicant pool. .</p>	<p>When vacancies existed, advertisement appeared in a number of "Minority publications" as well as tradition vehicles as Chronicle of Higher Education, professional publication, appropriate web sites, etc to attract under-represented faculty. In addition, job announcements were distributed at meeting attended by under-represented post docs such as The Compact for Diversity Conference Annual.</p>	<p>The Compact for Faculty Diversity: The Institute on Teaching and Learning has about 1000 under-represented minorities who are in the process of obtaining their PhDs from all over the country. Penn State is one of the institutions that regularly recruit at that conference for possible faculty and post-docs. The recruiters work with Human Resources in identifying vacancies and post doc announcement; they file all the materials in a loose leaf binder and have it available to students to review.</p>
<p>To insure that during the charge of a search, search committees and faculty at-large are deliberately identifying, nominating, and contacting potential candidates from underrepresented groups who fulfill the criteria of the search. Recruitment will be an active part of College practice.</p>	<p>The importance of diversity and included in each charge is that the committee MUST seek to present a diverse pool of candidate. Consideration of ethnic and racial minorities as well as women MUST be among the viable candidates.</p>	<p>The College has done a much better job to bring about gender equity than racial equity. During next strategic cycle, racial equity will be a major priority.</p>

<p>To expand areas of natural strength and interest that also attracts scholars from underrepresented groups.</p>	<p>AESEDA, and EASI are both institutes that bring students during the summers for SROP. Over the past two years <a href="#">Center for Environmental Kinetic Analysis (CEKA)</a> brought in four students for SROP. In addition, several under-represented students attend summer Research Experiences for Undergraduates (REU) Programs.</p>	
<p><b>Challenge 5: Developing a Curriculum that Fosters Intercultural and International Competencies</b></p>		
<p>To support Geography goal of diversify their curriculum.</p>	<p>The degree to which diversity is further integrated into the curriculum varies across the College. Geography focuses on the social, cultural, economic, and political forces that shape the past and present human landscape, and on the interaction between human and physical processes. The nature of the discipline ensures that diversity is fully integrated into the Geography curriculum, which has over a dozen core and elective courses that focus directly on race,</p>	

ethnicity and gender, or emphasize diversity issues with respect to other areas of human and environmental geography. For example:

GEOG 100 is a course on globalization and the global south, and provides both cultural and international credit for students.

GEOG 102 The American Scene treats race and ethnicity in the formation of the American landscape.

GEOG 401W, students write papers that focus on ethnic identity as expressed in the U.S. census returns between 1870 and 1930.

GEOG 419 is an international course on cities, and students write papers on non-North American urban places in GEOG 418.

In GEOG 470, Geography of the Global Economy, meets the international requirements for the international business major in Smeal College of Business.

A host of GEOG 497 courses has also integrated or directly addressed diversity issues.

Several General Education courses certified by the University Faculty Senate as Meeting the United States Cultures (US) and International Cultures (IL) or "US;IL" requirement are offered by the EMS. The College contributes to these offerings with four GI courses in Geography, one in Geosciences, and one in Earth Science:

GEOG 040: World Regional Geography

GEOG 103: Geography of the Developing World

GEOG 128: Geography of International Affairs

GEOG 415W: Gender and Geography (cross-listed with Women's Studies)

EARTH 105: Environments of Africa: Geology and Climate Change (cross-listed with AAAS)

GEOSC 402W: Natural Disasters

An additional GI course proposal from EGEE is currently being circulated for consultation within the University before being

	<p>submitted to the Faculty Senate:</p> <p><u>EGEE 120</u>: Oil: International Evolution</p>	
<p>The College Center for Advanced Undergraduate Studies and Experience (CAUSE) offers a year-long research seminar for undergraduates. About half of these have included summer programs abroad. These will continue in the future,</p>	<p>At the College level diversity again becomes a major theme of the College's annual CAUSE project. These projects are interdisciplinary and vary from year-to-year. While some have taken place in the U.S., most include an international field trip. Recent examples include:</p> <p><u>CAUSE 2003b</u> focused on coral reefs on San Salvador in the Bahamas, but also took the opportunity to experience local communities, and to discuss human threats to the reef and the importance of reefs to the economic future of small island nations.</p> <p><u>CAUSE 2003c</u> examined society's needs for energy and the societal benefits and costs of alternative energy development in Iceland and the United Kingdom.</p> <p>The College utilizes College funds and has received a substantial endowment to support CAUSE. Future CAUSE classes will include a focus on Africa, through the linkages developed by AESEDA.</p>	<p>Cause project for AY 2009-10 will feature People, Places and Parks will take place in South Africa.</p> <p>In additional, AESEDA is working currently developing a sustainability for the physically and mentally infirmed people of Jamaica WI. AESADA Research Associate has been taking a multi-racial group of students to build a sustainability village using cargo containers. Under-represented and majority students from EMS, Engineering, and Arts and Architecture have The programs has attracted from various majors and a partnership has ensued a partnership with Jackson State (HBCU in Jackson MS) to include their students as part of the Jamaica team.</p>

<p>To support The Department of Materials Science and Engineering is developing the International Internship in Materials (IIM) in order to enrich the learning experience of undergraduates by immersing them in international, world-class research activities. Likewise, by providing reciprocal opportunities for undergraduates from host institutions at Penn State, our students will benefit from the international student's perspectives and culture.</p>	<p>The Department of Material Sciences and Engineering has an International Internship Program in Materials with partners at the following institutions:</p> <ul style="list-style-type: none"> <li>Swiss Federal Institute of technology (Switzerland)</li> <li>Darmstadt University of Technology (Germany)</li> <li>University of Padua (Italy)</li> <li>National School of Industrial Ceramics (France)</li> <li>University of Leeds (UK)</li> <li>Shanghai Institute of Ceramics (China)</li> <li>University of Basque Country (Spain)</li> <li>University of Sheffield (UK)</li> </ul> <p>To date several students have taken advantage of the research exchange program.</p>	<p>The web site for the program is <a href="http://www.matse.psu.edu/iim/frmstdnts.html">http://www.matse.psu.edu/iim/frmstdnts.html</a></p>
<p><b>Challenge 6: Diversifying University Leadership and Management</b></p>		
<p>To support of faculty who are interested in participating in the</p>	<p>The Dean continues to encourage female faculty and staff as well as under-represented faculty to seek leadership experiences, Fulbright Opportunities, etc</p>	

<p>Administrative Fellows Program or CIC Leadership programs.</p>		
<p>The College is promoting more diverse decision-making and representative bodies within EMS. This enhances the access of faculty to College leadership and leadership roles, and creates a portfolio of service for the faculty member that promotes success.</p>	<p>The College has reorganized to begin to bring balance to the contributions that women and under-represented minorities bring to the executive level at both the college and departmental levels.</p> <p>Currently there are two unit leaders:</p> <ul style="list-style-type: none"> <li>o Associate Dean for Educational Equity</li> <li>o Unit Leader of EASI</li> </ul> <p>Two graduate officers</p> <ul style="list-style-type: none"> <li>o Geosciences</li> <li>o Materials</li> </ul> <p>The college continues to support WISE and its academic pre-college and collegiate programs.</p>	
<p>Development of the newly approved College Diversity Council as an opportunity to promote leadership opportunities for faculty,</p>	<p>The College Diversity Council has representatives from each department and Institute. The composition includes:</p> <ul style="list-style-type: none"> <li>OEE Staff</li> <li>2 Department Heads</li> <li>3 Staff Assistants</li> <li>---- Institute staff</li> </ul>	<p>Both workshops were well attended by faculty, staff assistants and students. From all departments within EMS. The committee was requested to host a similar workshop for Fall 2009, but with an emphasis on faculty. The Office of International Programs was very helpful in helping to assure</p>

<p>staff and students.</p>	<p>The Council meets formally each semester and on an as needed basis. Several overall College workshops have been sponsored by the committee. For example, Fall 2008 workshop on easing administrative matters for international students, Fall 2009 a workshop was held on faculty and international programs including topics like Risk Management, Fulbright, etc</p>	<p>the right mix of staff presented pertinent information to the EMS's employees.</p> <p>Currently, there is no student representative, for the next school, both undergraduate and graduate students will be invited to join the Diversity Committee</p>
<p>To develop leadership initiatives. The College is currently developing a proposal designed to establish a Penn State Women's Issues Forum and a Leadership Center in the College of Earth and Mineral Sciences at Penn State. The Center and Forum will be dedicated to the development of women leaders in the disciplines of the College.</p>	<p>As the EMS Women Issues Forum and Leadership Center is being thought through, departments have been encouraged to invite women seminar speakers to their monthly seminars and colloquies. In addition, the college monitors the women who are nominated and receives college awards and other recognitions.</p> <p>Over the past years, the college has sponsored a "Talking Across EMS" series which serves to encourage interactions between women, faculty, research associates and graduate students.</p> <p>Women matter is a prototype of advertising the important of women is Science and Engineering.</p>	<p>Over the past two years, several women speakers have been invited as seminar speakers. A weekly list of such seminars is published weekly and sent to faculty and staff via a list serve and posted on the College website.</p> <div data-bbox="1073 721 1625 1162" data-label="Image"> </div> <p style="text-align: center;">" Women Matter"</p> <p style="text-align: center;"><a href="http://www.matse.psu.edu/womenofmatse">www.matse.psu.edu/womenofmatse</a></p> <p style="text-align: center;">MATSE advertising material</p>

<b>Challenge 7: Coordinating Organizational Change to Support Our Diversity Goals</b>		
To completely overhaul of the College web pages to ensure that diversity and climate are a prominent element of the College's home page, and that the home page is a gateway to all of our policies and plans, as well as to the University and surrounding community.	Diversity is very visible on the College's web site. The links are clearly delineated and the range of services offer by both the college and the Office of Educational equity are both prominent and easily assessable.	The web site is in its final stages of review and should be up and running within the next few weeks.
To identify a significant number of graduate teaching assistantships to support recruitment of African-American, Hispanic-American and Native-American graduate students.	Graduate students who admitted to EMS are all offered multiyear funding (depending on degree) which is spelled out in a congratulatory letter. The funding comes from several funds including, Bunton-Waller, University, college and faculty sources.	The faculty/graduate officers, associate Dean for Graduate Education and Research and the associate Dean for Education all sign off on the funding packet.

<p>To identify significant funds for recruiting African-American, Hispanic-American and Native-American.</p>	<p>The Director for EMS under-represented Recruitment and Retention has his own budget for recruitment and retention. For incoming first year students the college has a limited amount of Bunton-Waller fellowships , other university funds and College funds, The Office of Educational Equity has Teas and Chelius Scholarship dollars to provide financial assistance to students.</p> <p>At the graduate level, the College continues to take advantage of the SLOAN scholarship which is award to underrepresented Ph.D candidates who has passed their candidacy examination.</p>	<p>The Recruitment and retention has its own cost center within EMS's Office of Educational Equity.</p>
<p>To increase the budget for educational equity Programs over the next three years</p>	<p>During fall 07, the Dean established an independent Office of Educational Equity with its own staff and budget.</p>	<p>The staff positions are designated as standing and permanent with permanent general funds. Each semester, the Office staff meets with the College budget officer to discuss funding and accountability.</p>
<p>To hire a new recruiter/advisor for our new Student Center. This will enable every undergraduate in the College to have an assigned faculty advisor and an assigned formal</p>	<p>The Ryan student Center (Office of Undergraduate Education) hired a new recruiter/advisor. Now that the team is complete a Recruiter's Club has been formed to plan collaborative recruitment and retention strategies.</p>	<p>The Director of under-represented Recruitment and Retention is a member of the Recruiter's Club.</p>

<p>advisor so that the College can take an even greater interest in the success of our students.</p>		
<p>Financial support for graduate student participation in SEEMS.</p>	<p>Graduate students who participate in SEEMS are provided financial support to help fund specific project proposed by the teams.</p>	<p>The funding comes from a combination of funds form Shell and/or EMS College monies.</p>
<p>To continue to commit funds to provide College-level "opportunity funds" as a direct match to the opportunity funds provided by the Provost. As a matter of policy, the College will fully match any funds provided by a department prior to seeking support from the Provost's opportunity funds.</p>	<p>The College continues to cost share "opportunities funds" when departments and/or institute hire an under-represent faculty and/or associate.</p>	

<p>To assist EMS raised funds through development efforts, to provide up to \$750,000 to add to University funds in the completion of the new EMS Student Center (including the advising and tutoring functions), CAUSE classroom, and Freshman Seminar classroom, computer support complex in the Deike Building, designed to create a “home” for EMS undergraduates.</p>	<p>The Ryan Student Center is fully operational and is serving as “the place” where student gathering. It is attractive, inviting as is being implementing as the designer’s envisioned. The Center is fully staffed and has a computer center and supplies for completing papers and other individual/ group projects. Tables arrangements are such that invite small group work. In addition, there is a small kitchenette and an individual meeting room for private meeting.</p>	<p>The Associate Dean for Undergraduate Education and support staff to aid the student’s matriculation is all housed in the Center. Support staff that are easily assessable includes advisors, tutors for math, and writing, Instructional technology.</p>
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