College of Information Sciences and Technology
Update of Progress Implementing *A Framework to Foster Diversity: 2004-2009*

The past several years have been very exciting times for the College of Information Sciences and Technology (IST). The following are selected milestones:
- We transitioned to a college
- We moved from three buildings to one state-of-the-art building
- We graduated our first class of undergraduates and have begun developing our alumni base
- We graduated our first class of M.S. and Ph.D. students
- We have established a strategic partnership with Tennessee State University (TSU), a historical black college/university (HBCU) for research and recruiting
- We have been successful in attracting both donor and research dollars
- We have grown our faculty and our undergraduate and graduate programs
- We have changed leadership with a new dean
- We have a new major, Security and Risk Assessment

But, the more things change, the more they remain the same. Our commitment to diversity and to a civil community has not wavered, and in fact, we have seen more conversations around the concept of a civil community and student centricity. We continue to be proud of our program, of our students, and of our leadership among information schools nationally.

The major challenges we faced when the school was born are the challenges we continue to face:
- Recruiting students who are female and/or from underrepresented groups
- Systematically integrating diversity into our curriculum
- Recruiting staff from underrepresented groups
- Developing metrics to measure progress

While we struggle to meet these challenges, we feel that we are making some progress on some fronts, less on others. We hope that this report of our activities, organized in terms our response to the targeted areas of improvement listed in the *Framework*, by the College of Information Sciences and Technology's diversity plan for each *Framework* challenge, and then by the specific questions for each challenge, will show our efforts, and we look forward to input as to how we can improve.

Campus Climate and Intergroup Relations

Challenge 1: Developing and Sharing an Inclusive Definition of Diversity

Framework Targeted Areas for Improvement:

The IST definition of diversity is inclusive of both demographic and intellectual diversity. Because of this broad definition, conversations about differences and disagreements are more easily brought into the open for discussion and consideration.

Units have not been encouraged to develop their own definitions.

We show our support for the University's nondiscrimination statement by including it in every course syllabus.

IST has a very active diversity committee. It offers a combination of social and educational activities open to the full IST community. The committee includes students and senior leadership as well as representation from across the college.

The assistant dean for Equity and Diversity serves on the dean's leadership teams, thereby integrating attention to diversity into decision making at the college level. Her office is welcoming to issues brought forward by faculty, staff, and students.

IST Diversity Strategic Plan for Challenge 1

1. Enhance the visibility of the definition of diversity.

   This has been partially accomplished through the dissemination of a brochure developed by the IST Diversity Committee (Appendix A). Diversity discussions have been held at most faculty meetings and at an annual faculty retreat, held in August of each year. More efforts need to be made to enhance visibility of the definition with students. Strategies will include asking faculty to include the full definition on each syllabus, providing students with the written definition during orientation, and developing a poster campaign.

2. Increase the visibility of the IST Diversity Committee.

   Significant progress has been made toward this goal. More communications are being sent to the IST community about committee sponsored events, and the posters from last year's diversity poster contest are prominently displayed by the classroom on the first floor of the building. A bookmark was made of the winning poster and was distributed to faculty and staff; many faculty and staff display the bookmark on bulletin boards outside of their offices.

3. Include attention to the definition in all student orientation activities.

   The assistant dean for Equity and Diversity is part of all student orientation activities, both graduate and undergraduate, and talks about diversity in IST. There needs to be more reinforcement, however, to increase the understanding of both of the definition and expectations for behavior. Strategies such as the ones mentioned above in enhancing the definition of diversity throughout the IST community should be considered.

   Some teachers of the first year seminar focus on diversity in that curriculum; this needs to be made more systematic and not instructor-specific.

4. Include attention to the definition in all faculty and staff orientation activities.

   Issues related to diversity are discussed at the annual faculty retreat meeting held in August of each year. In 2006, specific facilitated discussions were held in this area, with follow up committees created to explore definitions and issues related to diversity and climate. Mention is made in all orientation activities to the definition, but more follow up is needed.

5. Develop "Diversity in IST" conferences.

   This goal was developed to highlight the work of our faculty. We have not developed conferences, but our Office of Business and Career Solutions has included diversity-oriented sessions in the last three of four Future Forum conferences, conferences designed to highlight future trends in technology for our students. In addition, the IST Center for the Information Society has conducted several brown-bag presentations in this area. In 2004, Dr. Eileen Trauth of the Center won a grant from the National Science Foundation to host a Principal Investigators Conference (held in Philadelphia, PA) on research related to gender and information technology.

Framework Assessment Questions for Challenge 1

1. How does your unit define or describe diversity? How is this understanding demonstrated in areas of emphasis within your unit?

   The definition of diversity was recommended by the IST Diversity Committee in 2001, and has remained the same:

   "The College of Information Sciences and Technology will continue to develop a welcoming and nurturing climate to foster diversity at all Penn State locations across the Commonwealth of Pennsylvania that offer IST programs. Towards that end, IST supports and is committed to the University's statement and policies on non-discrimination.

   Our college focuses on two dimensions of diversity.

   Demographic diversity: Our college is committed to respecting and accepting the entire spectrum of diversity as articulated in the University's diversity mission; including, but not limited to, race, ethnicity, gender, age, sexual orientation, gender identity, physical ability, religious affiliation, and veteran's status.

   Intellectual diversity: Our college was born because of the need for students with an interdisciplinary education in the information sciences and technologies. Our faculty represents not only a wide range of disciplines including sociology, psychology, computer science, and mathematics, but also represents a variety of methodological approaches to scholarship. We strive to respect the array of approaches and backgrounds that our faculty and staff bring to the college."

   A new aspect of our philosophy of diversity has been introduced to include each individual's responsibility and commitment to making the college a community that respects diversity in all of its forms. The concept of "aggressive civility" has recently been introduced by the dean at the fall faculty/staff retreat. One of the hallmarks of the University is the opportunity for discourse around difficult and controversial issues, some with emotional and moral undertones. While encouraging the exchange of ideas, perspectives and feelings, we strive to keep individual judgments in check and to challenge individuals who do not act in civil and respectful ways.

2. How has your unit distributed information to students about the University's diversity initiatives? Does your unit have formal mechanisms in place for discussion of diversity initiatives with students? If so, please discuss.

Students receive information about the University's diversity initiatives through the inclusion of the non-discrimination policy on each IST syllabus and through electronic announcements of University-wide program offerings. They receive information about college initiatives through presentations at orientation and invitations to college events. In selected courses (such as the IST 440 W capstone course), some instructors provide special sessions on diversity to prepare students for working in industry in a diverse environment.

There are some mechanisms to discuss diversity initiatives with students, including several classroom initiatives and student organizations. D-Net, Diversity Network, is a student organization that regularly sponsors social and educational events for students that have diversity components. Dr. Terrell Jones has been a regular speaker.

3. How has your unit distributed information to faculty and staff about the University's diversity initiatives? Describe your unit's formal mechanisms for discussion of diversity initiatives.

Every faculty and staff member received information about college diversity initiatives this fall through the mailing of a brochure developed by the IST Diversity Committee. The brochure included definitions, resources, and links to university resources. There also are a number of diversity events, both college and university, to which faculty and staff are invited.

At Professor-in-Charge faculty meetings, unit staff meetings, Dean's Executive Council meetings, and Council of Deans meetings, University diversity initiatives and plans are shared by the dean.

The Office of Equity and Diversity maintains a list of current university events on its website.

There are no formal mechanisms for discussion of diversity initiatives.

4. What is the role of your diversity committee? What is its composition?

The role of the IST Diversity Committee is to identify ways in which the IST community can learn more about diversity, both in terms of awareness and skills. The committee provides educational and social opportunities throughout the year. Recent events have included:
- Straight Talks presentation to the faculty and graduate students
- Brown bag, "The Pennsylvania Underground Railroad"
- Diversity poster contest
- International luncheons open to all members of the IST community
- Programs by Dr. Terrell Jones, for students, faculty and staff, focused on building community

This past fall, a Fall Diversity Week was introduced, with events every day. International Dancers provided a recital, an international artifact contest was held, a speaker from Kosovo

spoke on the environmental situation and the impact on women, and a movie, "Muslims in America" were among the activities.

The committee has begun conversations focused on global diversity, and ways in which we can encourage our students to study abroad and do international internships. Efforts are focused in undergraduate advising and in the internship office to increase the number of students having international experiences.

The composition of the 2006-07 committee is as follows:
- Susan Agee, academic counselor
- Rishi Das, vice president, Diversity Network
- Ruth Donahue, corporate relations specialist
- Christopher Fivek, director, Office of Human Resources
- Frederico Fonseca, assistant professor
- Margaret Hopkins, coordinator of public information
- Penny Irvin, staff assistant, Finance
- Madhavi Kari, internship program coordinator
- Shannon Keller, external relations assistant
- Olivia Lewis, assistant to the assistant dean for Equity and Diversity
- Susan Lucas, assistant dean for Equity and Diversity, chair
- Sharoda Paul, graduate student
- Angelica Smith, president, Diversity Network
- Amy Spangler, staff assistant, Business and Career Solutions
- Laura Thomas, president, Women in Information Sciences and Technology

This committee has direct access to the dean and financial support provided by the Office of Equity and Diversity; it has its own cost center in the budget.

5. What is the role of your multicultural coordinator?

The role of the assistant dean for Equity and Diversity is to:
- Develop strategies to recruit and retain faculty, staff, and students who are female and/or members of underrepresented groups, including oversight for IST's Bunton Waller scholarship program
- Be a focal point of contact for International Programs, develop international programs, and promote global awareness
- Work closely with the Schreyer Honors College especially as it pertains to recruitment of females and members of underrepresented groups
- Chair the IST Diversity Committee
- Represent the college at University-level committees
- Engage in activities internally and externally to promote a culture of diversity and respect
- Support outreach and recruiting activities to support diversity

6. Which strategies have been most successful in addressing this challenge? Which have been least successful? Which could be termed as "best practices"?

The most successful strategies have been the placement of the assistant dean for Equity and Diversity in the college's leadership structure, the increasing visibility of the IST Diversity

Committee, and the increasing focus on globalization. The presence of the assistant dean for Equity and Diversity at functions such as Dean's Executive Committee meetings, IST Advisory Board Meetings, selected faculty meetings, and social events (e.g., for team-building, interaction with faculty, students, staff, and advisory board members) provides excellent visibility for the importance of equity and diversity within IST.

Less successful is the dissemination of information about the University's diversity initiatives. A systematic way of ensuring that all members of the college community are aware of initiatives, especially about *Framework* goals and updates, is needed.

7. What measures of success have you identified to gauge your progress in this Challenge? Include data demonstrating outcomes.

We intend to develop metrics during the remainder of the *Framework* period.

Challenge 2: Creating a Welcoming Campus Climate

Framework Targeted Areas for Improvement:

IST takes pride in offering a welcoming environment to prospective students and their parents as well as to our current faculty, staff, and students, Customer service is one of our core values, and that includes being welcoming and inclusive to both internal and external constituents.

We have processes in place for formal and informal assessment of climate and for diversity and education for students, faculty, and staff; and we continuously look for new ways to disseminate information about potential issues to the people or office that can address the issues.

The IST Diversity Strategic Plan has a prominent place on the "About IST" section of the IST home page (Appendix B). The Office of Equity and Diversity maintains information on its site about diversity at Penn State as well as diversity in IST—enrollment and faculty/staff profile information, resources, diversity committee minutes, and upcoming events (see Appendix C for a recent example). While resources for members of underrepresented groups are included, their visibility could be enhanced. Students from underrepresented groups are sent electronic notices of special scholarships, programs, etc., but we will consider special communications early in the fall semester welcoming new and returning students and identifying resources, such as tutoring, the LGBTA Resource Center, the Multicultural Resource Center, and the Center for Women Students, for example.

For faculty and staff searches, commitment to diversity is a criterion used to assess candidates. Potential staff members are asked to describe ways in which they have demonstrated such commitment and potential faculty are asked how diversity is included in their teaching and research.

In the past several years, there have been occasions to address specific individuals who have not contributed positively to climate, both in the classroom and out. Those individuals met with the dean, director of Human Resources, professor in charge, senior associate dean, and assistant dean for Equity and Diversity for counsel. We take seriously those behaviors that are harassing and lead to a hostile work or learning environment.

IST Diversity Strategic Plan for Challenge 2

1. Conduct climate survey of faculty and staff.

    Our climate survey was completed in spring 2006, and was distributed, collected, and analyzed by Penn State's Survey Research Center. The executive summary is found in Appendix D and the full survey report is available upon request. At University Park, all IST faculty, staff, graduate and undergraduate students were sent a brief survey; 28 percent completed and returned their questionnaires (this is considered a good rate of return for electronic surveys). A similar survey was conducted with staff in 2000, and when possible, comparisons are made.

    Highlights of results:
    *   Eighty-seven percent of respondents felt comfortable or very comfortable with the climate in the college (15 of 18 respondents in 2000 reported the same). Male respondents were statistically significantly more likely to report feeling comfortable compared to females, and students, as compared to faculty and staff, were more likely to report a comfortable climate.
    *   Climate was perceived to be most comfortable for people under aged 30, people from different racial and ethnic backgrounds, and women. Climate was reported to be less comfortable for people over 50 and for members of the lesbian, gay, bisexual, and transgender community.
    *   Twenty-nine percent of faculty, staff, and students answering questions indicated that they had had negative experiences within the past year; half felt that it was based on gender and a third felt that it was based on race. Women were statistically more likely to report an experience based on gender while men were more likely to report an experience based on race
    *   Negative experiences tended to take the form of hearing offensive conversations and jokes, and being ignored.
    *   Having a positive climate for diversity was something the majority of respondents felt was important in both 2000 and 2006.

    We plan to hold focus groups in the spring to delve deeper into issues related to race and gender.

2. Develop strategies to assess climate for students.

    Both graduate and undergraduate students were included in the 2006 climate survey. Undergraduates, through the Undergraduate Student Government, hold annual meetings with the dean, professor in charge, and assistant deans to talk about classroom and other issues. New initiatives to address climate issues for graduate students include holding "Coffee with the Deans" to provide an open forum for discussion. Suggestion boxes have also placed throughout the building for faculty, staff and students to provide anonymous input about whatever they feel is important.

3. Identify additional ways for climate issues to be identified and addressed.

    We continue to work on building a "community of trust" where issues can be brought forward for discussion. The dean has stated strongly in public meetings where every IST

faculty and staff member has been invited that every person in IST has the right to being any issue forward without fear of retribution. More mechanisms need to be developed.

We have added a third sexual harassment resource person who is a staff member, Shelly Kachik, to complement the resource persons already available (director of Human Resources and assistant dean for Equity and Diversity). It is clear that these resources need to be better publicized and that students, both graduate and undergraduate, are aware of these resources.

4. Provide opportunities for awareness and skill training.

Annually, a list of all diversity programs offered through the Human Resource Development Center and the Affirmative Action Office is sent to all managers to use in the Staff Review and Development Process. University events such as Faculty/Staff Forums, Commission for Women events, Commission on Racial/Ethnic Diversity sponsored programs, and Commission on Lesbian, Gay, Bisexual and Transgender Equity training opportunities are also publicized.

Two of our student groups—Women in Information Sciences and Technology and Diversity Network—are active in recruiting events as well as in offering programs to women and members of underrepresented groups that we believe are important retention tools for all.

We regularly assess our marketing communications pieces, both paper and electronic, for their representativeness of a diverse population, both demographically and in terms of scholarship.

A new focus at IST is on training for new supervisors.   As the staff and organization changes, new supervisors are being strongly encouraged to participate in Penn State programs such as the Mastering Supervision program which involves training in diversity and equity.

Framework Assessment Questions for Challenge 2

1. How does your unit's leadership demonstrate support for diversity?

Both the past and current dean have been proactive in speaking about their commitment to diversity and to a healthy community of scholars. Leadership participates in diversity events, and climate is an issue almost always mentioned in faculty meetings and meetings of the dean's leadership teams.

The challenge that we face in recruiting women and members of underrepresented groups is a common topic of conversation, both formally and informally. Faculty, staff, and students recognize that the recruitment of a diverse student body has to be a critical priority if the IT workforce has a chance of representing its customers, both nationally and internationally.

2. How does your unit identify climate issues?

Through issues brought forward to and by faculty, staff and students, through two annual senior surveys, and through our climate surveys.

3. How does your unit monitor climate issues?

    We monitor climate issues in several ways. First, all faculty and staff are encouraged to report incidents that may reflect poor employee management, discrimination, or harassment to the director of Human Resources or the assistant dean for Equity and Diversity, should they feel uncomfortable having these discussions with their unit director or professor in charge. An electronic note reminding faculty and staff of reporting procedures is sent out each fall. Anyone may go to any member of the Council of Deans with concerns as well. In addition, specific discussions are held at the annual faculty retreat, held in August of each year.

    Second, the IST student government offers annual sessions for students to voice concerns with classroom and co-curricular activities, which can include classroom climate and interest house concerns. At the most recent meeting, concern was expressed about the lack of female students.   A concern about the climate for gay students in the interest house was brought to the assistant dean for Equity and Diversity, who worked on its resolution with Resident Life staff.

    Third, issues are monitored through climate surveys. The most recent survey is described above.

4. How does your unit respond to climate issues?

    We respond on both an individual and college level. All faulty and staff, during their annual reviews, are assessed on the degree to which they contribute to a positive climate for community. On the individual level, people who have been identified as contributing to a negative climate have had reduced salary increases. Individuals who have contributed to a hostile work environment have been separated from the University, through voluntary resignation or through forced termination.   If such an event occurs, special diversity training sessions are held to provide information and closure for the IST community.

    On the college level, at every public gathering, both the past and current dean have spoken about having zero tolerance for behavior that is disrespectful, aggressive, and threatening to others. For example, at the most recent faculty staff retreat, the dean clearly stated that every member of the college community has the responsibility for making the community a respectful place to work and learn.

    The Affirmative Action Office has worked closely with the college on faculty and staff concerns, and this fall offered workshops addressing hostile workplace issues; a workshop was also offered to graduate students but due to lack of interest it was cancelled.

    With staff located on different floors in our new building, communication issues have arisen. The director of Human Resources has been holding regular meetings with staff on both floors to understand the issues and to find solutions that come from the ground up rather than being imposed.

    A faculty ombudsman is in place to hear faculty concerns and suggest remedies. That person primarily has been focused on resolving faculty-faculty conflict.

5. What unit-wide and individualized approaches have been developed to enhance overall climate and individuals' satisfaction with the environment?

Units tend to hold their own celebrations and recognitions. College-wide, there are fairly systematic get togethers to have social interaction among all members of the faculty and staff to continue the process of people getting to know one another and to integrate new hires. Each month, the dean sponsors a "Community Interaction," held on a Friday afternoon in one of the lounges in the IST Building to encourage people to interact in a relaxing setting. The purpose of the event is to break down barriers between faculty and staff.

A new initiative, begun last August, has been the discussion among faculty and staff about the values of the college. A values clarification activity took place at the annual faculty and staff retreat, and a set of values was specified:
- Diversity
- Respect
- Community
- Work-life balance
- Customer service
- Open communication

A committee with representation from each IST unit and faculty rank has been working to develop working definitions of each value as well as a set of recommendations for the dean to enhance the climate for each value; recommendations are expected in January, 2007. We believe that the process is an important activity that not only brings faculty and staff together, but in gives individuals a voice in the future of the college.

6. Which strategies for creating a welcoming campus climate have been successful? Which have been least successful? Which could be termed "best practices"?

Having mechanisms in place to assess the climate, having a variety of ways for climate issues to be identified and addressed, and having the conversation about values are the most successful strategies. Less successful are the visibility of these initiatives to all members of the IST community.

At this point in our history, it is probably premature to identity best practices in creating a welcoming climate. We can say, however, that it is an underpinning of many of our core values. Faculty and staff take pride in being welcoming and inclusive. We are striving to build on an already strong working and learning community.

7. What measures of success have you identified to gauge your progress in the Challenge? Include data demonstrating outcomes.

Measures of success would include the diversity climate data, described above. We will repeat the climate survey on a regular basis.

Representation (Access and Success)

Challenge 3: Recruiting and Retaining a Diverse Student Body

Framework Targeted Areas for Improvement:

From the data presented by the Office of the Vice Provost of Educational Equity, which looks only at the retention of students within the University and not within the college in which they first enrolled, there appear to be some disparities; these data are found in Appendix E. After six years, 98 percent of students who began in IST have graduated, compared to 88 percent of student from underrepresented groups. We do not understand why this disparity exists; it may be partially due to the very small numbers involved percentages are inflated. But we also believe that retention studies are most meaningful when analysis looks at the experiences of students within the college. We are in the midst of a retention study that will examine, within the college, retention rates with particular emphasis on women and members of underrepresented groups.

The number of women and minority students is small, and we need to improve our recruiting efforts. We track the progress after graduation of all of our students and are proud to say that we have among the highest undergraduate job placement rate, 95 percent, and highest average starting salaries, $57,000, at the University. There rates are consistent across race and gender.

We continue to attract international graduate students and they make important contributions to the culture of our college.

All of our students work closely with academic and faculty advisors, and we believe this significantly adds to the retention of our undergraduate and graduate students. In our IST 590 graduate seminar, special efforts are made to provide students with skills to support their graduate studies and eventual employment.   At the graduate level, every student is evaluated by their advisory committee to ensure that they are making appropriate progress in their academic and personal life.

IST Diversity Strategic Plan for Challenge 3

1. Continue and strengthen partnerships with Admissions, the Philadelphia Recruitment Center, and appropriate Academic Advancement programs such as Talent Search and CAMP.

   As stated above, we work closely with these offices and programs. Representatives from IST attend the Fall Admissions Conference, are part of recruiting sessions offered by Admissions across the country, and help with programs such as "Spend a Summer Day" and "Spend a Fall Day."

2. Develop D-Net.

   D-Net, our college's student diversity organization, now has a strong presence in the college, offering a variety of programs and working in conjunction with other student organizations.

3. Focus on faculty outreach and research as sources of potential students and as a retention strategy.

   We have been working with interested faculty to help them develop programs that could be taken into middle and high schools as demonstration of the types of work in which IST is engaged.

   Outreach programs for girls have grown significantly over the past few years. The college has so far offered five free Saturday and Sunday program series for high school girls: "Gaming for Girls" and "Graphics for Girls." Last summer, IST offered a day camp for middle school girls, "Gaming for Girls: Digital Storytelling and So Much More." All of these programs have afforded faculty and graduate students the opportunity to conduct research on the impact of these programs on girls' attitudes toward computers and technology. Outcomes of these programs are described in response to the first *Framework* question for Challenge 3.

4. Continue to develop and fund programs that reach middle and high school students.

   These efforts are ongoing and have been described. Recent discussions with the IST Advisory Board have indicated the possibility of significant corporate funding to develop programs for middle and high schools students (e.g., to fund summer programs and camps).

5. Benchmark student profiles with similar schools to develop recruitment goals.

   Students for the past several summers have conducted IST funded research that looks into barriers to participation for females and members of underrepresented groups as well as specific recruitment strategies. They identified lack of role models and lack of financial support as barriers.

   Their attempts to benchmark with the other information schools were not successful in the time allotted to them. They were able to determine, however, that the few schools they were able to contact did not offer any special initiatives to attract a more diverse student body.

6. Continue and enhance mentoring programs.

   Our funding from Lockheed Martin to support the "Cross Culture, Cross Gender" program continues. In this program, first year students are matched with upper-class students. We find anecdotally that this eases the transition to college for students. It is meant for all students, and we try to create mentor-protégé pairs that reflect diverse backgrounds and interests. Business and Career Services also has a new mentoring program that matches students with industry executives.

7. Create a database of IST-related scholarships available for women and members of underrepresented groups.

   A list of all available scholarships is maintained by the Office of Development and Alumni Relations.

8. Encourage student organizations to continue their participation with Lion Scouts and the Pennsylvania Governor's School.

   We have taken a slightly different approach from the time that this goal was developed, as the Governor's School funding was not renewed. Our volunteer student organization, VISTA, is composed of students who are active recruiters for the college. They serve on student panels during recruiting events and conduct building tours for families who visit the college. We have worked to encourage both females and minority students to participate in this program.

Framework Assessment Questions for Challenge 3

1. Describe specific initiatives your unit may have that are intended to contribute to recruiting or retaining undergraduate and/or graduate students from underrepresented groups.

   Undergraduate Recruitment and Retention

   Recruitment: We continue to work with Admissions by participating in "Spend a Summer Day" and "Spend a Fall Day" as well as participating in the Philadelphia Convocation ceremony. IST has a full time recruiter and diversifying the student body is one of her goals.

   In April, IST conducts an Open House, inviting University Park-qualified students from across the country with a science, technology, or social science interest as evidenced by their PSAT. A segmented mailing is conducted to parents of these prospective students: majority males, minority females, and minority males. The messages in the letters are tailored to assure parents that their children have a place in IST.

   In the spring, our female student group, Women in IST, conducts a phone-a-thon focused on women and members of underrepresented groups. The assistant dean for Equity and Diversity also calls each member of an underrepresented group who has been offered admission to Penn State with an interest in IST.

   Also in the spring other information sessions are offered around the state. Last year sessions were available in Pittsburgh, Philadelphia, Wilkes-Barre, and northern Virginia.

   Retention: Strong support from IST leadership, both financially and in person, is given to WIST and D-NET. Representatives from both student clubs are on the IST Diversity Committee.

   Our academic advisors closely monitor the progress of all students and meet at least twice a semester with each student.

   We support student research programs such as MURE and the Summer Undergraduate Research Fellowship (SURF) program.

   Our Web and paper communications have become more inclusive in pictures and messages.

   Students have attended the Commission for Women banquet and Martin Luther King, Jr. Day festivities and are provided financial support to attend conferences. We also support student participation in the annual Chaka Fattah Conference and the Achievement Conference.

The Lockheed Martin Cross Gender, Cross Cultural Mentoring program continues in its fourth year and is described above. This past year, we have 30 freshman paired with upperclassman.

WIST's participation in the summer WISE camp has not been as strong the last few years. Plans are in place to strengthen their relationship with WISE. A workshop was presented at the November WISE program. WIST females acted as summer camp counselors for the WISE camp for the past several summers.

Undergraduate student composition at University Park is compared for fall semesters 2000, 2003, and 2005:

Race/Ethnicity	2000 % (n)	2003 % (n)	2005 % (n)
Asian American	6 (18)	9 (62)	8 (61)
Black American	2 (6)	2 (15)	3 (24)
Hispanic/Latino	4 (12)	2 (17)	2 (19)
Native American	0 (0)	0 (0)	0 (0)
Total	13 (36)	14 (94)	13 (104)
International	2 (6)	3 (18)	1 (11)
White	85 (236)	84 (576)	85 (661)
TOTAL	100 (278)	100 (688)	100 (776)
Gender			
Male	74 (207)	83 (608)	88 (681)
Female	26 (71)	17 (127)	12 (95)
TOTAL	100 (108)	100 (735)	100 (776)

In terms of students from underrepresented groups, we are doing fairly well, but want to be better. More outreach needs to be focused on minority high schools, and more scholarship monies need to be identified. The most common answer when a student from an underrepresented group is asked about a decision to attend another school versus Penn State is that other schools offer better financial packages.

We continue to lose strides in attracting females to the college. While we know that female enrollment in computer science and other technical areas is approximately 10 percent nationally, we are not satisfied with that percentage. A new approach to getting more

females in the pipeline began about a year and a half ago. A series of programs aimed at high school girls was developed and delivered. These programs are offered on Saturdays and are focused on various aspects of computer games: design, development, graphics, and collaboration.   An average of 25 girls attend each class; all classes have been free.

Evaluation data indicate that the girls feel more competent with their computer skills at the end of each program. Several of our faculty members and graduates students are conducting research on girls' attitudes toward computers and gaming and they evaluate each program. Their parents' attitudes are also assessed. Parents report that their daughters want to continue learning more about gaming and computer graphics as a result of attending one of our programs.

Last summer, we offered a week-long day camp to rising 7th, 8th, and 9th grade girls. The camp, "Digital Storytelling and So Much More," attracted 27 girls. They created their own video games and a digital scrapbook of the week, were engaged in a Shaver's Creek team building activity, participated in an emergency management simulation, and toured the Learning Factory, just to name a few of the activities. Program evaluation results were very positive. Girls said they would be more likely to take a computer course in high school as a result of attending the camp, and one father said that his daughter finally understood the importance of taking math. This camp was co-sponsored by Lockheed Martin. Next summer, the camp will also be co-sponsored by Minitab.

Graduate Student Recruiting and Retention

Recruitment: IST continues with our major strategies used to recruit graduate students. We work with the Applied Research Laboratory to recruit students from historically black college and universities and provide research opportunities. Direct visits are made by faculty to the colleges with whom they have contacts. A mailing is sent to prospective graduate students based on their GRE scores and interests (1100 or better, with interests in areas such as applied math, cognitive psychology, economics, and data processing).

We provided financial support for an African American student to visit IST as she was making her decision about graduate schools; she selected us and we are providing her with Bunton Waller funding.

Retention: One new retention strategy has been to offer graduate students the chance to have "Coffee with the Deans" as a mechanism to express any concerns. We also have a strong mentoring program with faculty mentors.

A stipend and tuition are provided to virtually all IST doctoral students and financial support is provided to students attending conferences to present papers (one trip per matriculation). All graduate students are encouraged to attend the Achievement Conference.

Below are data for graduate students; IST's graduate program began in 2001.

Race/Ethnicity	2001 % (n)	2003 % (n)	2005 % (n)
Asian American	0 (0)	7 (3)	3 (2)
Black American	0 (0)	11 (5)	6 (4)
Hispanic/Latino	0 (0)	0 (0)	3 (2)
Native American	0 (0)	0 (0)	0 (0)
Total	0 (0)	17 (8)	11 (8)
International	83 (10)	52 (24)	51 (37)
White	17 (2)	30 (14)	38 (27)
TOTAL	100 (12)	100 (46)	100 (72)
Gender			
Male	50 (6)	63 (29)	69 (50)
Female	50 (6)	37 (17)	31 (22)
TOTAL	100 (12)	100 (46)	100 (72)

Our comparison shows that we have lost some ground proportionally in attracting female graduate students as well as students from underrepresented groups. Half of our graduate students continue to be international students.

2. Describe specific initiatives your unit may have that are intended to reduce intergroup disparities in enrollment, retention, and graduation rates.

There are no initiatives specific to reducing inter-group disparities in enrollment, retention, and graduation rates. All of IST advising and student services are focused on helping all students be successful.

3. What mechanisms for collaboration has your unit established?

We have partnerships in place with the Administrative Council on Multicultural Affairs, Admissions, the Philadelphia Recruitment Center, Upward Bound, and CAMP. We also have a strong relationship with the Division of Undergraduate Studies; a DUS counselor has an office in the IST Building. We have met with various colleges to discuss ways in which we might work together in offering outreach programs, for example, with Eberly College of Science. A new initiative involves forming a relationship with the Technology Student Association at State College High School and the middle schools in the local school district.

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Internal to IST is the collaboration between the Office of Undergraduate Programs, the Office of Equity and Diversity, and the Office of Communications. These offices have formed the IST Marketing and Recruiting Committee, and meet regularly to develop strategies to market and recruit top students to the college. Marketing materials are evaluated regularly to ensure that they are welcoming and represent an inclusive environment to prospective students and their parents.

2. Which recruitment and retention initiatives have been most successful? Which have been least successful? Which could be termed "best practices"?

    Undergraduate recruitment strategies that have been most successful include using students as recruiters and going out into communities and high schools to recruit. We consider our student recruiting program to be a best practice. We hope that our outreach programs for girls, which we plan to grow to include a focus on underrepresented groups, will eventually lead to enrollments as well. Graduate recruitment and retention strategies have been successful due to the financial support available.

    We need to find new and creative ways to recruit females and members of underrepresented groups at both the undergraduate and graduate levels.

3. What measures of success have you identified to gauge your progress in this Challenge? Include data demonstrating outcomes.

    Our measures of success are our enrollment numbers, shown above. We need to undertake benchmarking with other I-schools in order to develop meaningful goals.

Challenge 4: Recruiting and Retaining a Diverse Workforce

Framework Targeted Areas for Improvement:

Meeting this challenge continues to be a high priority for us, especially as we have been growing steadily since we were formed in 1999. We strive to provide an environment in which people feel welcome and included, and a climate that welcomes healthy dialogue.

From the beginning, the concept of IST as family has been part of our culture. It is stressed that family comes first, and there are many examples of family crises and illnesses where many resources have been mobilized to support the IST faculty or staff member being away from work for the time that is needed.

Contributions to community and diversity are assessed during the faculty review process and during staff evaluations and are tied to salary increases. All staff members are strongly encouraged to participate in formal education and training not only in diversity topics, but in ways that will help them advance in their careers. During the promotion and tenure process, diversity as a topic of research is evaluated positively as are collaborative projects among faculty within IST and with faculty at other Penn State colleges and other institutions of higher education. Respect for intellectual diversity is included in our definition of diversity.

1. Engage current faculty and staff in identifying and recruiting candidates.

    The director of Human Resources serves on all staff search committees. Committees are formed to represent the expertise that is sought of the candidate as well as to represent the various units within the college that the candidate will interact with in the course of the job.

    All faculty members have the opportunity to participate in faculty searches by attending job talks and through individual meetings with the candidate. When a faculty search begins, the chair of the committee briefs the faculty as a whole on the planned marketing and recruiting procedures and solicits ideas. Faculty members often recruit at their professional conferences.

    If a candidate is from an underrepresented group, he or she is given the opportunity to meet with other members of that group to get a good sense of the cultures of State College, the University, and IST.

2. Strengthen the partnership with the senior Faculty Mentor.

    This has not occurred to the extent we had planned. Several years ago, the senior faculty mentor met with leadership of the college to discuss ways we could systematically collaborate, but we did not follow up.

3. Continue to educate all search committees about appropriate hiring processes and affirmative action procedures.

    Each faculty search committee is briefed by the Affirmative Action Office on appropriate processes and procedures, and the assistant dean for Equity and Diversity serves on all faculty search committees to ensure that affirmation hiring is practiced.

    As stated above, the director of Human Resources serves on all staff search committees and at the first meeting of each committee, provides information about appropriate processes.

4. Provide opportunities and funding for professional development

    During the SRDP process, all employees are required to define their development opportunities for the upcoming year; SRDPs submitted without these plans are returned to the unit to be completed. Funding for professional development is included in each unit's budget.

Framework Assessment Questions for Challenge 4

1. How has your unit actively and successfully engaged in locating and recruiting faculty and/or staff from underrepresented groups?

    Below are the data reflecting the profile of faculty from 2000, 2003, and 2005; data was provided by the Office of Educational Equity.

Race/Ethnicity	2000 % (n)	2003 % (n)	2005 % (n)
Asian American	29 (4)	19 (6)	21 (9)
Black American	0 (0)	10 (3)	7 (3)
Hispanic/Latino	0 (0)	0 (0)	0 (0)
Native American	0 (0)	0 (0)	0 (0)
Total	29 (4)	29 (9)	27 (12)
White	71 (10)	71 (22)	73 (32)
TOTAL	100 (14)	100 (31)	100 (44)
Gender			
Male	86 (12)	74 (23)	66 (29)
Female	14 (2)	26 (8)	34 (15)
TOTAL	100 (14)	100 (31)	100 (44)

The racial/ethnic profile of the faculty has remained relatively constant. We have slightly increased the proportion of females.

The historical staff profile is as follows (excluding executives and academic administrators which is presented later):

Race/Ethnicity	2000 % (n)	2003 % (n)	2005 % (n)
Asian American	0 (0)	1 (1)	4 (2)
Black American	0 (0)	1 (1)	0 (0)
Hispanic/Latino	0 (0)	0 (0)	0 (0)
Native American	4 (1)	0 (0)	4 (1)
Total	4 (1)	2 (2)	6 (3)
White	96 (22)	96 (54)	94 (48)
TOTAL	100 (23)	100 (54)	100 (51)
Gender			
Male	65 (15)	34 (19)	31 (16)
Female	35 (8)	66 (37)	69 (35)
TOTAL	100 (23)	100 (56)	100 (51)

As the data show, there are few changes in the demographic profile of IST staff since 2003.

2. What strategies have been implemented to improve identification and assessment of credentials for purposes of hiring and promotion?

   We have no new strategies in place.

3. What retention strategies have you implemented in your unit to retain and promote the success of faculty and/or staff from underrepresented groups?

   There are no strategies specific to underrepresented groups; as a college, we work hard to make IST a community that is welcoming and inclusive for all. There are social events, brown bag luncheons, and various celebrations where the faculty and staff come together.

   When new faculty member arrives, they are paired with a senior faculty member in their area of expertise who serves as a mentor. They are available to provide guidance in the areas such as career development and promotion and tenure.

   Our Office of Research assists in retention by proactively identifying funding sources for faculty and by assisting them with proposal writing.

4. Which recruitment and retention strategies have been most successful? Which have been least successful? Which could be termed "best practices?"

   Being able to recruit and retain a diverse faculty is a source of pride for IST. Our search processes are very rigorous and inclusive, and existing faculty, staff, and students in IST are able to meet and evaluate each candidate.

   We are less successful in recruiting a diverse staff, a challenge faced by many units across the University.

5. What measures of success have you identified to gauge your progress in this challenge? Include data demonstrating outcomes.

   Measures of success are the proportion of women and members of underrepresented groups, as presented above.

Education and Scholarship

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

Framework Targeted Areas for Improvement:

IST was created to develop leaders for the digital, global economy. This focus in the classroom and in internships is embedded in our problem-based learning approach to education and to stress the importance of teams.

Our faculty is very diverse, hailing from a variety of countries and disciplines. They bring their international experience into the classroom, and students have the opportunity to take classes from scholars with academic expertise that includes computer science, mathematics, sociology, and psychology.

The IST undergraduate curriculum provides a unique opportunity for discussing diversity.   Our focus on training leaders for a digital, global economy encourages development of course materials, projects, and discussions that focus on how the digital economy is forcing "a flat earth," linking all countries via the Internet. An example of types of projects include using project teams that are distributed around the state and recent experiments involving project teams distributed across multiple countries.

IST Strategic Diversity Plan for Challenge 5

1. Increase international education and internship opportunities

   The Office of Business and Career Solutions has been working to establish an international internship program using company contacts and faculty relationships. It has been working closely with the International Association for Exchange of Students for Technical Experience (IAESTE), the Penn State student organization is developing an IST chapter. IAESTE's approach is slightly different in that each internship opportunity they can identify for an international student is matched with an international opportunity that is held for a student

from the United States. Approximately 10 students have completed international internships since 2004.

A proposal for an exchange program with Singapore Management University has just been approved by the Office of International Programs. Their School of Information Systems offers a curriculum very similar to ours in content and pedagogy, and Dr. Chao Chu, professor of IST, recently completed a sabbatical at the University and has been a strong advocate for this exchange program.

Since 2001, a total of fifteen students have participated in study abroad programs.

Central IST staff also assisted the York Campus with an innovative approach to an articulated transfer program that will begin in 2008. Students at the Vidyalankar Institute of Technology in Bombay, India will take their first two years of an IST baccalaureate degree in India (the courses have been evaluated and approved), then transfer to the York Campus to complete their junior and senior years to earn a Penn State degree. This will certainly contribute to the diversity of the York Campus and may lead to Penn State student interest in studying in India.

"Global Awareness Day" began for the first time last year. This is an initiative designed to introduce students to different cultures and promote study abroad opportunities. The speaker was Dr. Nan-Sheng Lin, president of Innomedia, who spoke about "Globalization—A Perspective of a High Tech Company in Silicon Valley." Other events that day included two panels, "Discover: Reflections on China and Taiwan," offered by James Wang, Peng Liu, and John Yen, all faculty members in IST, and Bao Ming Li, faculty advisor to the Chinese Friendship Association; and "Discover: Learning Opportunities in China and Taiwan, " offered by Jill Meder of the Office of International Programs. A reception was also open to all faculty, staff, and students attending Dr. Lin's presentation. Students who attended could earn course credit.

2. Assess degree of inclusiveness in problems used in problem-based learning.

   There has been some progress toward reaching this goal, as described in the *Framework* questions to Challenge 5.

3. Develop classroom problems specific to diversity issues.

   This goal is instructor specific. Several instructors have included problems related to diversity in the first year seminar and in IST 440W, the senior capstone course, but it is selective. One instructor has included the Race Relations Project in her 400 level diversity course.

   In the project management courses, real world consulting problems with an international focus are brought into the classroom. One corporate client requested that a student team research the best way to translate web content into different languages.

   As their final project for the freshman seminar course, one instructor required students to develop a video that "busted" stereotypes about students majoring in technology disciplines.

A design project in IST 331 focused on creating user interfaces for the blind. Students interviewed blind computer users, talked with the assistive technology experts in the library, and conducted on-line research to inform their projects.

4. Incorporate more diversity content into course outlines in the IST curriculum.

    This goal is also instructor specific. A number of faculty members have indicated that they include diversity content when appropriate and that it is not necessarily part of the formal course outline.

5. Identify internship opportunities in female- and minority-owned organizations.

    The Office of Business and Career Services has placed interns with Vis.align, a female-owned company based in Philadelphia. The office also uses a web site to identify other female owned companies in the United States for students to consider in the future.

6. Engage minority- and female-owned companies in class projects.

    Vis.align has offered several class projects, and during Governor's School in 2005, students interacted with female experts in videogame development.

7. Ensure intercultural and international issues are taken into account with identifying and selecting guest speakers.

    Many faculty invite guest speakers into their classrooms from other cultures and disciplines. Women from the corporate sector are invited into classes and also are frequent guests of the student organization, Women in Information Sciences and Technology. Our Distinguished Speaker Series includes females and members of underrepresented groups.

    IST has hosted guests from Taiwan, Israel, Sweden, Germany, the Netherlands, and India.

8. Ensure minority and female students receive leadership opportunities on project teams in the classroom.

    All faculty members are aware that with the small number of females in the classroom, it is critical that they be given leadership opportunities and there is the same sensitivity to providing leadership opportunities for members of underrepresented groups. There was an incident recently where a teaching assistant alluded to the lack of technology skills and knowledge among female students; this has led to awareness training for all teaching assistants. Faculty are cognizant that the teams need to be as diverse as possible.

Framework Assessment Questions for Challenge 5

1. What initiatives has your college taken in supporting multicultural curriculum efforts?

    The college requires all students to master third level proficiency in a foreign language and take six credits of foreign cultures cores. Three credits of international/intercultural competence must be completed as well.

Information about ways in which multiculturalism can be incorporated in their curriculum is distributed to faculty members. Several have participated in the Schreyer Institute's series on teaching and learning focused on diversity.

Financial support has been provided to faculty members who attend professional conferences to share information about their diversity-related courses and for international travel to conduct their research.

In the Office of Business and Career Services, "CultureGrams World Edition" is available and provides reference tools to give students insider perspectives into international cultures, although it is not clear that students and faculty are aware that it is available.

2. What research and teaching in your college has advanced the University's diversity agenda?

Courses have been developed to specifically focus on diversity issues:
- IST 402/341: Human Diversity in the Global Information Economy. This course examines the effects of human diversity on the analysis, development, and use of information systems and technology. Guest speakers are included that discuss corporate diversity statements, religion, and sexual orientation.
- IST 441: Information Retrieval and Organizations. This course covers the practices, issues, and theoretical foundations of organizing and analyzing information and information content for the purpose of providing access to textual and nontextual information resources. It includes discussion of cultural biases of search engines, including biases related to language.
- IST 442: Information Technology in an International Context. This course teaches international concepts to improve strategies for the design, dissemination, and use of information technology.
- IST 445H: Globalization Trends and World Issues. This honors course covers trends in globalization and their influence on U.S. policy making as well as the role of the U.S. in international issues.
- IST 413: Usability Engineering. Two weeks of this course are devoted to issues of universal design, universal access, culture and design, and localization. Included in the discussion are issues related to ownership of the engineering experience.
- IST 501: Qualitative Research in Information Sciences and Technology. This course assists IST researchers in their efforts to learn about and employ appropriate qualitative methods in their research and includes focus on measuring utilization of information technologies by members of underrepresented groups and women.

In IST 331, Organization and Design of Information Systems: User and System Principles, time is spent discussing the value-based design of user interfaces, which includes being explicit about the tacit values that a design team may unknowingly embed in a design e.g., competitiveness, individualism. IST 402, Popular Culture and Technology, addresses diversity issues as they are often an underlying component in much of the technology-related popular culture. IST 301, Information and Organizations, is using virtual teams to work on developing a manual for emergency procedures; team members are from the United States, China, Korea, Netherlands, and Spain. In IST 440W, Global Software Development, virtual teams at the York Campus were also used; IST students worked with students in India. They even went on a field trip to India so that all participants could meet face-to-face.

Research of several faculty members is focused on domestic and international diversity issues:

- Eileen Trauth's work looks at cultural and individual differences in the social shaping of gender in information technology, and she has done work comparing IT careers in Ireland and the United States. She has edited an encyclopedia, "Social Inclusion." Dr. Trauth won an NSF award entitled, "A field study of individual differences in the social shaping of gender and IT."
- Lynette Kvasny continues her work into the causes and solutions for the digital divide. Her work includes a critical feminist perspective on the intersection of gender, race, and class in shaping digital inequity. She is the recipient of an NSF career research award entitled, "Improving the participation of under-served groups in the information society."
- Mary Beth Rosson and Jack Carroll research communities of learning.
- Magy El Seif-Nasr and Andrea Tapia examine girls' interest in computers and technology and the impact of outreach programs on their interest.
- Chris Hoadley looks at the development of identity and cross-cultural issues in interface design. He is also studying cross-cultural understanding in the Himalayan region and conducts research on broadening participation in educational technology design.
- Mary Beth Rosson also studies the individual differences that are associated with learning and the use of web authoring tools, developed a "storytelling" tutorial for middle school girls to learn a 3D programming environment, and is starting a new project that will investigate the concept of a developmental learning community in recruiting and retaining women in IT education and careers.

In the training of teaching assistants, special attention is paid to increasing awareness of international issues. A class that introduces them to teaching includes issues of people in other countries. In that same class, two team projects addressed multicultural issues in teaching and learning.

Our research centers contribute to the national body of knowledge on diversity in information technology:

- The Institute on Information Policy, co-sponsored with the College of Communications, has conducted sponsored research and self-funded programs on the social implications of information technology, with an emphasis on the potential of information technologies for improving democratic discourse, social responsibility, and quality of life.
- The Center for Human Computer Interaction (HCI) seeks to leverage and integrate diverse HCI activities throughout the university to facilitate interdisciplinary faculty interaction relating to HCI issues, problems, and opportunities. The Center also seeks to help focus and coordinate research and service projects throughout the wider community.
- The Center for the Information Society explores the human context of the global information society through interdisciplinary social science research. Researchers focus on evaluating how people use information and communication technologies in their work, their homes and in their communities, aimed at solving complex socio-technical problems.

3. How is diversity integrated into the curriculum of your college?

Because of the problem based learning approach of all IST courses, employing a variety of perspectives to solve a problem is inherent in our curriculum. Faculty members are

encouraged to include problems that help students consider cultural issues, both domestic and international.

As stated above, all undergraduate students are required to demonstrate a third level proficiency in a foreign language and take six credits of foreign cultures courses.

A new track has been developed, "Globalization," that requires nine courses and is focused on increasing awareness of diversity, both domestic and international. Courses include Human Diversity in the Global Economy, Global Systems Development, Information Technology in an International Context, Internationalization of Software, Information Technology and Economic Development, and Information Environments.

4. Which strategies for developing a curriculum that fosters intercultural and international competencies have been most successful? Which have been least successful? Which could be termed "best practices"?

The courses that are diversity focused have been most successful in meeting this challenge. We need to be more systematic, however, in making sure that diversity issues are included in all courses where appropriate.

We have many opportunities to incorporate domestic and international diversity content into courses and projects. Our college would also like to increase the participation of our students studying abroad, although as our course requirements are difficult to match at other universities, it requires careful planning at the beginning of the freshman year.

Our best practice for this challenge is the problem-based team approach required in all of our undergraduate classes. This puts students in situations where they must learn to work together to be successful. Employers tell us that our graduates' team skills are one of the most important reasons they hire our students.

5. What measures of success have you identified to gauge your success in this challenge? Include data demonstrating outcomes.

Our metric is the number of courses that are diversity focused or diversity enhanced. We are beginning to collect that information so that we can make historical comparisons.

Institutional Viability and Vitality

Challenge 6: Diversifying University Leadership and Management

Framework Targeted Areas for Improvement:

Being the youngest college at Penn State has its opportunities and challenges with respect to diversifying leadership and management. While the majority of our formal leadership team is composed of white males, there are many opportunities for voices of many different kinds to be heard and taken into account in college-level decision making. We are making efforts to "flatten" parts of the organization as well, which should encourage the participation of more staff in decision making.

We also have been very successful in recruiting and retaining a diverse faculty, a faculty that, when appropriate, strives to include diversity in the classroom, and full participation in faculty meetings to ensure that a variety of intellectual voices are included is encouraged. Our senior faculty also serve as mentors to the junior faculty in issues related to professional development, promotion, tenure, career development, and leadership.

There are few committees in the college, but there are efforts to include women and members of underrepresented groups whenever possible and appropriate, given the charge to the committee. There is also sensitivity that individuals not be tapped for every committee by virtue of their personal characteristics or intellectual fields of study.

As administrative and management positions become open, the college will make every effort to conduct searches, create short lists, and hire final candidates that will diversify our pool of leaders.

IST Strategic Diversity Plan for Challenge 6

1. Include women and members of underrepresented groups in leadership training.

    The college is proactive in encouraging all staff members to engage in professional development activities, particularly women and members of underrepresented groups. At the current time, four women are attending the Office Professional Certificate Program. There has always been very strong attendance at the annual Women's Leadership Program.

2. Develop a College of Information Sciences and Technology Fellows Program.

    This has not been pursued because of the many other priorities in creating the college.

3. Encourage and reward participation in the three commissions for equity.

    To date, two faculty members and a staff member have been involved in the Commission on Racial/Ethnic Diversity, one faculty member has been a member of the Commission on Lesbian, Gay, Bisexual and Transgender Equity (CLGBTE), and the assistant dean for Equity and Diversity was co-Chair of CLGBTE in 2005-06.

    In March, with the call for nominations for membership in each commission, information is sent to all faculty and staff. Plans are in place to bring in the leadership of the commissions this upcoming spring to offer a panel discussion about their commissions' roles in the hopes of generating additional interest in service.

4. Assess the commitment to diversity on the part of candidates for faculty and staff positions.

    Either the assistant dean for Equity and Diversity or the director of Human Resources is a member of each search committee to ensure that interviewing and hiring processes are adhered to. The chair of each faculty search committee and as many committee members as possible attend the annual briefing on affirmative action processes in hiring given by the Office of Affirmative Action.

Faculty: When faculty positions are available, the faulty as a whole is involved in a number of ways: they review position announcements and advertising locations, and when possible, use their scholarly networks to encourage candidates to apply. Search committees are composed of a diverse representation of faculty in their specific fields, as well as the assistant dean for Equity and Diversity.

All faculty candidates must give a job talk open to all members of the college community and each faculty member has the opportunity to meet with each candidate for a new position. Each candidate must explicitly discuss the ways in which diversity is integrated into their teaching and research.

Staff: Each staff search committee is composed of staff with the job knowledge appropriate to screen and make recommendations for candidates; the director of human resources serves on each committee. The short list of candidates meets with representatives of all units within the college with whom they would have job-related contact. Each candidate is asked to describe ways in which they have demonstrated their commitment to diversity.

Framework Assessment Questions for Challenge 6

1. How are unit leaders actively involved in diversity efforts?

    All unit leaders are expected to be advocates for diversity and are expected to discourage discrimination and harassment. They are proactive in assessing the climate in their units and in taking steps to encourage healthy working and learning communies.

    The dean expects all members of the IST community, including himself and all unit leaders, faculty and staff members, and graduate students to attend workshops on hostile work environments.

    The assistant dean for Equity and Diversity provides leadership at the University level by serving on the search committee for the director of the WISE institute and through her membership on the Council on Engagement, Faculty Senate Committee on Educational Equity and Climate, Educational Equity Advisory Board, and Administrative Council on Multicultural Affairs. She is past co-chair of the Commission on Lesbian, Gay, Bisexual, and Transgender Equity and is a long standing volunteer member on the Commission for Women. She will also serve (and has served in the past) on one of the review teams to assess the updates by college and support units on their progress implementing *A Framework to Foster Diversity*. Dr. Lucas is the Penn State representative to the National Council on Women in Information Sciences and Technology.

2. What is the profile of the unit's administrative and executive levels?

    The IST leadership is predominantly composed of white males, as follows:

    Dean: Male, White
    Senior Associate Dean: Male, White
    Associate Dean: Male, White
    Assistant Deans: One male, one female; both white
    Professor in Charge: Male, Chinese American
    Director of Human Resources: Male, White

Director of Development: Male, White
Director of Business and Career Solution: Male, White
Director of Finance: Male, White
Director of Communications: Male, White
Director of Research Office: Female, White

3. Describe the procedures followed to create both diverse applicant pools and search committees for administrative searches. How is information about expectations regarding candidates' skills and experience with managing diversity communicated to the committee and to the candidates?

Being such a young college, the only administrative searches in our history have been for the professor in charge and the dean. For the professor in charge, who acts as a department head in a college without departments, recommendations were made by the faculty to the dean, who then made the appointment.

A national search was conducted for the first dean. Susan Welch was chair and IST faculty served as the majority of the committee for the national search for the second dean.   The final pool consisted of one woman and two men; each candidate was asked in open forums about their feelings about diversity and their experiences with developing civil communities. The search was not successful with an offer made to the woman who declined the opportunity. For the follow up search, the successful candidate had been the interim dean, and had made his commitment to diversity and community well known to faculty, staff, and students.

4. How does your unit identify staff and faculty from underrepresented groups who have administrative aspirations and potential, as well as assist them in developing leadership and management skills? How are such individuals supported in identifying opportunities for advancement?

All qualified, interested and talented individuals are encouraged to develop their management and leadership potential. Professional learning plans are included as part of the Staff Review and Development Process. It is the responsibility of each unit director to help in identifying opportunities for advancement. The dean has provided financial support for professional development for staff to increase their opportunities for advancement.

5. Which strategies for diversifying your unit's leadership and management have been most successful? Which have been least successful? Which could be termed as best practices?

Our search committee processes ensure commitment to affirmative action and assessment of a candidate's commitment to diversity, and we are pleased with the systematization of these practices.

Opportunities for leadership development and training are open to all faculty and staff.

With virtually no turnover at the top levels of the college, it has not been possible to diversify leadership with respect to demographic characteristics. It is a diverse team, however, in term of academic backgrounds, including chemical engineering, sociology, journalism, petroleum engineering, mathematics, and physics. It is this diversity that helps inform the decision making for the college.

6. What measures of success have you identified to gauge your progress in the Challenge? Include data demonstrating outcomes.

    Our metric is the proportion of female faculty and faculty from underrepresented groups (shown previously in this report) as well as the proportion of female administrators and administrators from underrepresented groups. There has been no change in the profile of administrative leadership with exception of the addition of one woman with the formation of the Office of Research.

Challenge 7: Coordinating Organizational Change to Support our Diversity Goals

Framework Targeted Areas for Improvement:

Building a healthy community in times of transition and change is an opportunity that we embrace. We moved into a new building in 2004, and used the time prior to the move to make sure all of the difficulties that we could anticipate were taken care of. Of course, we encountered issues that could not be anticipated, but there was a transition team in place to deal with them. One of the unanticipated consequences of the move was the location of faculty and the dean's office on one floor, and administrative offices on another. This has led to some cultural separation as well as physical separation, but it is a work in progress. A number of events have been initiated to being the groups together, such as a monthly social get together sponsored by the dean's office, tailgates sponsored by individual units, and other social events. A brown bag series that focused on both units and faculty was attempted, but attendance has been poor.

The Office of Equity and Diversity continues to be the major advocate for diversity, but since the last *Framework* update, there are more voices and activities. As mentioned previously in this document, a number of faculty members have integrated diversity content into their courses and a Globalization Theme track is under development. Most of the diversity initiatives at the college level, however, are initiated by the assistant dean for Equity and Diversity and through the IST Diversity Committee, also described previously. The budget for the Office of Equity and Diversity has slowly but steadily increased since the creation of the office, and an additional staff member has been hired to support diversity outreach initiatives. The assistant dean continues to report to the dean and serves on the Dean's Executive Council and Council of Deans.

The college continues to be proactive in searching for faculty and staff that represent diverse populations and/or ways of thinking. Search committees for faculty and staff include either the director of Human Resources or the assistant dean for Equity and Diversity to ensure adherence to principles of equal opportunity and to oversee advertising and recruiting activities that are broad in scope. Search committees are composed of diverse intellectual representatives of the college as well as representatives of various skill levels.

IST Strategic Diversity Goals for Challenge 7

1. Prioritize diversity efforts in development activities.

    Over $1 million has been raised in the form of Trustee Scholarships for students in IST. More than 100 students have benefited from these scholarships in the past two years.

Companies such as Boeing, Lockheed Martin, and Minitab provide funding ranging from scholarships to support for summer camps to support for student organizations, totaling approximately $9500.

2. Continue and expand diversity initiatives with corporate partners.

   Lockheed Martin and Boeing continue to be our major partners in diversity initiatives. Conversations are ongoing with new partners interested in supporting diversity efforts, including IBM, Dell, Deliotte, CAI, HPTI, and DocFinnity.

3. Encourage each unit in the college to develop internal diversity initiatives.

   Each year, all unit directors are provided with lists of Affirmative Action Office and Human Resource Development Center educational activities to use in helping staff in their professional development plans. Units have not developed individual initiatives.

4. Identify linkages between the Office of Equity and Diversity and all units within the school.

   The assistant dean has met with all unit directors to learn how office indicatives can be integrated within the entire college. While there is more awareness of the scope and responsibilities of the Office of Equity and Diversity, some within-college partnerships are still lacking. There has, however, been more discussion with the office when diversity or community related issues arise.

Framework Assessment Questions for Challenge 7

1. How does your unit's strategic plan reflect the importance of diversity for meeting your goals and objectives?

   Our vision statement includes a focus on community:

   "IST will be a leading solution for defining and strengthening the field of information technology (IT) in the larger academy. In short, we will strive to be a 'field shaper.'

   To that end, we will continue to craft what the outstanding IT program should look like and strive to be ranked as one of the best (if not *the* best) programs in the IT field.

   IST will be known for conducting boundary-pushing, multi- and inter-disciplinary research focused on the integration of the key elements of people, information, and technology that cross disciplinary boundaries and links theory and application.

   IST will be a community of scholars that provides a unique climate for learning in and outside of the classroom and through which IT leaders for this century will be built." (*Strategic Plan 2005-2008*, page 6.)

   The college has four strategic goals:
   - Administrative Support and Architecture
   - Student and Curricular Support

- Research Direction and Support
- Cross-Campus Partnerships

Under Administrative Support and Architecture, a diversity goal was defined:
"to make diversity planning and implementation a seamless part of the IST community."
The accompanying metric: to double the current percentages of minority undergraduate and graduate students in IST, to increase the number of minority staff members by at least two, and the number of minority faculty members by at least two in the planning period. These goals have not been achieved, with the exception of female additions to the faculty.

2. What organizational realignments, systems of accountability, resource mobilization and allocation strategies, and long-term planning strategies have been implemented by your unit to ensure the realization of the University's diversity goals?

The college recently changed its budgeting systems away from a central budget to unit-based budgeting. The budget for the Office of Equity and Diversity has grown slowly but steadily, a reflection of the financial commitment of the College to the importance of diversity initiatives.

IST is one of the few colleges that has an assistant dean devoted to equity and diversity rather than a staff-level multicultural coordinator, an indication of the financial and moral commitment of the college.

IST's Diversity Strategic Plan is organized along the seven Framework Challenges to ensure that the University's long range strategic goals are met.

3. What budget and development approaches have been implemented by your unit to ensure financial stability of diversity initiatives?

The Office of Equity and Diversity has an independent budget, one that has been growing steadily since the office was established three years ago.

4. Describe the systems of accountability and reward that support the achievement of diversity goals.

During the SRDP process and the faculty review process, staff and faculty contributions to a healthy IST community are assessed and annual salary increases are adjusted accordingly.

5. What partnerships, with internal or external units and/or constituencies, have you created to advance the university's diversity goals?

Partnership with companies such as Boeing and Lockheed Martin have assisted in supporting outreach programs for girls and our student organizations of WIST and D-Net. Internally, the assistant dean works with minority coordinators across colleges to maintain knowledge about the University's ongoing diversity efforts. We continue to work with Admissions in coordinating recruiting efforts and have started some cross-college initiatives, such as with the Eberly College of Science, to coordinate outreach efforts for girls and the College of Engineering, to coordinate outreach efforts to the Girl Scouts.

6. Which strategies to coordinate organizational change in support of diversity goals have been most successful? Which have been least successful? Which could be termed best practices?

The college's placement and support of the Office of Equity and Diversity continues to be a positive strategy, as is the increasing visibility of that office.

We continue to struggle, as do other units across the University, with the recruitment of a diverse staff.

Our retention strategies for all staff and faculty focus on the personal. The dean and senior leadership have open door policies for the airing of problems or concerns.

One very positive strategy has been the continued message that diversity and civil engagement is important and that acts of intolerance will not be allowed.

7. What measures of success have you identified to gauge your progress in this challenge? Include data demonstrating outcomes.

The measure is the proportion of diverse faculty and staff, as identified previously.

COLLEGE OF INFORMATION SCIENCES AND TECHNOLOGY
2006 Diversity Climate Survey
Executive Summary

- Surveys were distributed electronically to all faculty, staff, administrators, undergraduate students and graduate students in March, 2006 by Penn State's Survey Research Center. Twenty-eight percent of the surveys were returned. This is a standard rate of return for electronic surveys. Undergraduate students were most likely to return their surveys.
- The survey was similar to the survey that was distributed to faculty and staff in Fall, 2000; 18 people returned surveys at that time. When possible, comparisons will be made.
- Because of small numbers, faculty, staff and administrators are grouped together as are undergraduate and graduate students for analysis purposes. Comparisons by gender are made but due to small numbers, it was not possible for comparisons to be made by racial background.
- Detailed findings and a copy of the survey used are attached.
- The majority of respondents (87 percent) reported feeling comfortable or very comfortable with the climate in the college (15 of 18 respondents in 2000 reported the same).
    --Male respondents were significantly more likely than females to feel very comfortable.
    --Students (92 percent) were more likely than faculty and staff (72 percent) to rate the climate as comfortable or very comfortable.
- Respondents rated the climate as comfortable or very comfortable for people under 30 (91 percent), people from different racial and ethnic backgrounds (83 percent), and women (82 percent). Climate was most likely to be perceived to be uncomfortable or very uncomfortable for people over 50 (16 percent) and lesbian, gay, bisexual and transgender people (12 percent).
    --There were some differences in perception of climate for people with various characteristics by students and faculty and staff, with students less likely to report comfortable climates for people with disabilities (58 percent vs. 77 percent), people over 50 years (58 percent vs. 88 percent), and people aged between 30 and 50 years (65 percent vs. 88 percent).
- Twenty-nine percent of respondents reported negative experiences in the past year; 50 percent felt it was based on gender and 33 percent felt that it was based on race (few respondents in 2000 reported negative experiences).
    --Women were more likely to report a negative experience based on gender while males were more likely to report an experience based on race.
    --Fourteen faculty or staff members reported negative incidents as did 57 students.
    --Students were more likely than faculty and staff to report experiences based on race (35 percent vs. 7 percent), ethnicity (33 percent vs. 0 percent), and country of origin (30 percent vs. 0 percent) while faculty and staff were more likely to report age (36 percent vs. 19 percent).
    --Experiences took the form of hearing offensive conversation (63 percent), being ignored (52 percent)—both significantly more likely to be reported by women than men—and hearing offensive jokes (51 percent).

- --Faculty and staff were more likely than students to have heard offensive conversation (71 percent vs. 53 percent), to have felt ignored (71 percent vs. 40 percent), and to have been the target of derogatory remarks (57 percent vs. 32 percent); students were more likely than faculty to report having heard offensive jokes (48 percent vs. 36 percent).
- Slightly more than one third (38 percent) of respondents reported that they had witnessed negative experiences over the past year.
  --Half of the experiences were based on race and 46 percent were perceived to be based on gender; 43 percent were perceived to be based on sexual orientation.
  --Eighteen faculty and staff members witnessed incidents as did 76 students.
  --Students were more likely than faculty and staff to witness experiences based on race (53 percent vs. 28 percent), ethnicity (45 percent vs. 22 percent), country of origin (43 percent vs. 22 percent), and age (33 percent vs. 17 percent), while faculty and staff were more likely than students to witness negative experiences related to sexual orientation (45 percent vs. 28 percent).
  --Experiences witnessed were most often offensive conversation (75 percent) and offensive jokes (72 percent).
  --Students were more likely than faculty and staff to witness offensive jokes (80 percent vs. 41 percent) and to observe others staring (50 percent vs. 12 percent); faculty and staff were more likely than students to witness someone being deliberately ignored (44 percent vs. 29 percent).
- Having a positive climate for diversity was something the majority of respondents felt was important in both 2000 and 2006.
  --Men were significantly more likely than women to agree that having a positive climate for diversity is a top priority.
  --Faculty and staff were more likely than students to feel that diversity is a top priority (91 percent vs. 77 percent) and that it fosters an environment that supports teamwork (93 percent vs. 79 percent). These faculty and staff data are consistent with those collected in 2000.
- A wide variety of general comments were expressed, including concern over the lack of demographic diversity in the college, particularly the small number of women; comments about the generally positive climate; mention of some difficulties understanding international professors and students; and some comments about comfort levels for lgbt individuals.

Conclusions
- The climate remains positive for most faculty and staff and at first assessment, is comfortable for students.
- The importance of diversity also remained consistent.
- Issues related to trust that were raised in the 2000 study were not mentioned in 2006.
- Negative experiences were more likely to be mentioned in 2006. They focused around race and gender and were experienced by hearing offensive conversations and jokes.

Retention and Graduation Rates, 1997-2004, College of Information Sciences and Technology

The following tables provide retention and graduation rates for successive cohorts of baccalaureate regular admit students for each fall semester from fall 1997 through fall 2004. The data are for 1) multicultural students (African/Black American, American Indian/Alaskan Native, Asian and Pacific American, and Latino/Hispanic American) and 2) white students. Retention data indicate the percentage of students retained at any Penn State location within any Penn State college (excluding Penn College). Graduation data indicate the percentage of students who graduated from any Penn State location with any Penn State degree, including students who change to associate degree status and graduate with associate degrees (excluding Penn College).

Multicultural Students

All University

ADMIT SEMESTER	FA97	FA98	FA99	FA00	FA01	FA02	FA03	FA04
NUMBER OF STUDENTS			36	37	54	49	37	23
% RETAINED								
AFTER 1 YEAR			88.8	91.8	85.1	85.7	89.1	86.9
AFTER 2 YEARS			83.3	83.7	77.7	77.5	78.3	
AFTER 3 YEARS			80.5	78.3	72.2	69.3		
% GRADUATED								
AFTER 4 YEARS			55.5	72.9	55.5			
AFTER 5 YEARS			69.4	83.7				
AFTER 6 YEARS			72.2					

University Park

ADMIT SEMESTER	FA97	FA98	FA99	FA00	FA01	FA02	FA03	FA04
NUMBER OF STUDENTS			16	20	18	15	13	13
% RETAINED								
AFTER 1 YEAR			93.7	95.0	94.4	93.3	100.0	92.3
AFTER 2 YEARS			81.2	85.0	88.8	93.3	92.3	
AFTER 3 YEARS			81.2	80.0	88.8	80.0		
% GRADUATED								
AFTER 4 YEARS			75.0	85.0	83.3			
AFTER 5 YEARS			81.2	85.0				
AFTER 6 YEARS			87.5					

[*]These data are taken from the University database using the AIDAE-RPM utility. Retention data for students admitted in fall 2005 are not available at this point in the data cycle; graduation data are available through the fall 2001 cohort. "Regular admit" excludes advanced standing, provisional, non-degree and non-degree to degree, readmit, and reinstate statuses.

White Students

All University

ADMIT SEMESTER	FA97	FA98	FA99	FA00	FA01	FA02	FA03	FA04
NUMBER OF STUDENTS			139	274	300	235	239	151
% RETAINED								
AFTER 1 YEAR			89.9	94.1	90.6	86.3	91.6	84.7
AFTER 2 YEARS			81.2	83.2	83.3	74.8	85.3	
AFTER 3 YEARS			76.2	70.8	73.0	70.2		
% GRADUATED								
AFTER 4 YEARS			70.5	61.3	64.0			
AFTER 5 YEARS			76.9	73.7				
AFTER 6 YEARS			79.1					

University Park

ADMIT SEMESTER	FA97	FA98	FA99	FA00	FA01	FA02	FA03	FA04
NUMBER OF STUDENTS			57	123	112	73	85	57
% RETAINED								
AFTER 1 YEAR			100.0	100.0	92.8	97.2	98.8	100.0
AFTER 2 YEARS			96.4	95.1	91.9	90.4	96.4	
AFTER 3 YEARS			91.2	83.7	85.7	87.6		
% GRADUATED								
AFTER 4 YEARS			92.9	78.8	81.2			
AFTER 5 YEARS			98.2	90.2				
AFTER 6 YEARS			98.2					