Affirmative action will build science, engineering workforce

by Susan Trulove

When the University of Michigan Law School asked to be able to use race as one factor for admission, one argument used against them was that now everyone has equal opportunity, said Barbara Hargrave, a faculty member at Old Dominion University and Eastern Virginia Medical School. But Justice Ginsburg said that minorities still encounter unequal conditions and opportunities, Hargrave said, speaking at the Norfolk State University symposium on “Affirmative Action and Increasing the Number of Minorities in the Sciences.”

“Affirmative Action is still needed,” Hargrave said. “Most people have a problem detecting patterns of discrimination. And there are still a relatively small percent of women and minorities with degrees and employed in science and engineering.”

The two-day Council for Advancement and Support of Education (CASE) sponsored program at Norfolk State University (NSU) included discussions of the role of Affirmative Action from primary school through undergraduate and graduate school, and in launching a research career, and the role of Affirmative Action as a parent of the next generation of scientists and engineers.

Nuria Curbés of NSU Academic Affairs, reported that minority students do well in math and science until the fifth grade, “then they become less interested. They are not taking the science and math classes.” She said, “There are four critical junctures: academic preparation for college, high-school graduation, enrollment in college, and persistence to bachelor’s degree completion.

“Minority students are less prepared for the GRE and for science and engineering degrees,” she said. “If students aspire, they are able to overcome challenges. Programs such as STARS demonstrate this. The strongest predictor of success in graduate school is aspiration.”

Ron White of the NSU math faculty said that preparation to become a scientist or engineer is often blunted years before high school. “In fourth grade, we start to bore our students. We need to increase motivation, increase students’ understanding of what they are capable of doing.” He said he tries every year to have one student decide to major in math or science. “Models for success need to be available in grade school, in high school, and in that first-year college experience.”

Eleanor Jones, retired NSU math faculty member, agreed, “Affirmative Action alone is not sufficient to increase enrollment in science and math. Those in the field must convey the excitement and joy of these fields.”

Demetris Giddis, NSU engineering faculty member, observed, “There are more African American men going to prison than going to college. Many of my friends did not go to college.” The same might have happened to him, he said. “When I was in second grade in South Carolina, I took a test that placed me in a lower level reading class. A problem in the south is that many African Americans are tracked. But I moved to the city and my fourth grade teacher thought I could do math. I was one of three African Americans in my high school trig class, but when I was a sophomore and the counselor asked me what I wanted to do, I told him I wanted to be an electrician. He said, ‘You’re pre-calculus. Why not be an engineer?’”

Giddis said he didn’t even know what “an engineer” was. “When I came to NSU, it was the first time I had a minority teachers. Then I received a McNair Scholarship for first generation college students. Affirmative Action didn’t inspire me, but it did help me.”

Jones said her education was at a time when it was illegal for blacks and whites to go to school together. In her all-black school, “All my math teachers were black. The murder of Martin Luther King Jr. motivated people to try Affirmative Action. For me to earn a Ph.D. in math, I had to go out of state, but the state paid.”

Support continues to be critical. Curbés said that another challenge for college students at the junior and senior level is family pressure or financial pressure. “Minority students, particularly women, need to have a support group.”

See Affirmative action on page 3

Shared Lives Anti-Bias Tool Kit: Helping children to acknowledge, understand, appreciate diversity

by Sarah L. Smidl

When the community attempts to address the recent hate crimes that have taken place on campus, the importance of preventing such behavior becomes monumental. Naturally any incident where someone treats any person or group of people as inferior will provoke a caring community to ponder numerous questions. Most will angrily contemplate, “How can people think that way?” and “What can we do about it?” Helping human beings to understand differences in others is highly complex and the importance of this task cannot be minimized. However, the answer to the question of what we can do may be simpler and more readily available than many people realize. The answers can be found in looking towards early childhood education as a starting point to help human beings acknowledge, understand, and appreciate diversity.

The following situations are only a few of the real-life examples I have experienced during my 9 years working with children. They are brief yet alarming, and should make any person concerned about the future of our world begin to consider what could be done to break the cycle of ignorance that feeds this way of thinking. These scenarios also show how biases can encompass a multitude of areas including many that do not immediately come to mind when one thinks of diversity. They can include stereotypes about boys and girls, rich and poor, height or weight, jocks or nerds, old and young, sexual orientation, race, culture, physical appearance, or physical abilities. Sam, a 4-year old boy is talking about the children he plays with after school. Tom says, “I used to have a brown friend but I can’t play at his house anymore.”

After the winter break three preschoolers are talking about what they got for Christmas. Alfred says, “I didn’t get any presents because my family doesn’t celebrate Christmas.” Stephanie’s eyes reach saucer-like size and she retorts, “NO PRESENTS? That’s stupid!!”

A kindergarten boy is preparing to play a game of superheroes on the playground. Maggie walks up and asks, “Can I play?” Joshua replies, “You are too fat to be a superhero.” Mark adds, “Besides, girls aren’t fast enough to be real superheroes.” Maggie cries and walks away.

Max, an 11-year old boy with spina bifida and in a wheelchair is excited about his first day at a new school. From the next lunch table he hears Sonya whisper, “Did you see the boy in the wheelchair?” Lisa says, “Don’t get too close, or you might catch what he has.”

If we really want to prevent the acts of ignorance that are direct impacts on your experience at Virginia Tech...
Black life in America

By the numbers:

Editor &apos; s note: Some of the preceding data were collected in surveys and, therefore, are subject to sampling error. Questions or comments should be directed to the Census Bureau &apos; s Public Information Office; telephone: (301) 763-3030; fax: (301) 457-3670; or e-mail: pio@census.gov.

Education

Among blacks age 25 and over, the proportion that had at least a high school diploma in 2003 - a record high. This proportion rose by 10 percentage points from 1993 to 2003. For blacks age 25 to 29, the proportion is considerably higher: 88 percent.

Among blacks age 25 and over, the proportion that had a bachelor &apos; s degree or higher in 2003 - up 5 percentage points from 1993.

Among blacks age 25 and over, the number who had an advanced degree in 2003 (e.g., master &apos; s, Ph.D., M.D. or J.D.).

Estimated work life earnings for full-time, year-round, black workers with an advanced degree. For blacks (and people of other races), more education means higher career earnings: blacks without a high school diploma would earn less than $1 million during their work life, increasing to $1.0 million for those with a high school education and $1.7 million for those with a bachelor &apos; s degree.

Serving Our Nation

2.3 million

Number of black U.S. military veterans in 2003.

Income and Poverty

About $30,000

The average median income in 2003 of black households. This represents no change from 2002.

24.4 percent

Poverty rate in 2003 for those reporting black as their only race. This rate was unchanged from 2002.

Families

8.9 million

Number of black families in the United States. Of these, nearly one-half (47 percent) are married-couple families. Among black married-couple families, 34 percent consist of two members, and 19 percent consist of five or more members.

10 percent

Proportion of black children who live in a household maintained by a grandparent.

46 percent

The proportion of black householder who own their own home.

Jobs

31,400

The number of black physicians and surgeons. Blacks are represented in a wide variety of occupations. For instance, there are about 64,800 black postsecondary teachers; 26,300 chief executives; 33,900 lawyers; 5,600 news analysts, reporters and correspondents; and 1,500 legislators.

Population Distribution

Note: Unless otherwise indicated, the data in this section refers to people who reported black, whether or not they reported any other races.

Nation

1.6 million

The size of the increase in the black population between Census Day, April 1, 2000, and July 1, 2003. The rate of increase for this group was 4.4 percent, higher than the overall increase of 3.3 percent for the population as a whole.

61.4 million

The projected single-race black population of the United States as of July 1, 2050. According to this projection, blacks would constitute 13 percent of the nation &apos; s total population on that date.

25.5 million

The net number of single-race black people who will have been added to the nation &apos; s population between 2000 and 2050. The projected percentage increase of this population would be 71 percent.

55 percent

The proportion of single-race blacks who live in the south.

52 percent

The proportion of single-race blacks who live in the central cities of metropolitan areas.

States

3.6 million

The estimated black population of New York on July 1, 2003, highest of any state. Four other states had black populations that surpassed 2 million: Florida, California, Texas and Georgia.

37 percent

The estimated proportion of Mississippi &apos; s black population as of July 1, 2003, highest percentage of any state in the nation. Louisiana (33 percent), South Carolina (30 percent), Georgia and Maryland (29 percent each), and Alabama (27 percent) followed. The District of Columbia, classified as a state equivalent by the Census Bureau, has a population that is 60 percent black.

292,000

The number of blacks added to Florida &apos; s population between Census Day, April 1, 2000, and July 1, 2003. Florida led all states in that category. Georgia, which added 133,380 blacks, was the runner-up.

Counties

1.4 million

The estimated number of black people in Cook County, Ill., on July 1, 2003. Cook led all the nation &apos; s counties in the size of its black population. Los Angeles, Calif., also had a black population exceeding 1 million.

70,000

The number of blacks added to the population of Broward County, Fla., between Census Day, April 1, 2000, and May 1, 2005, the highest total of any county in the nation.

Age Distribution

32 percent

The proportion of the black population under 18 as of July 1, 2003. At the other end of the spectrum, 8 percent of the black population was 65 or over.

Shared Lives... Continued from page 1

manifestations of these early learned beliefs, we need to intervene during a child &apos; s first experiences as he or she begins to encounter and contemplate differences and what they mean. These scenarios demonstrate how young children quickly learn to be influenced by social stereotypes that directly lead to the development of prejudices. Without a way to help children develop an understanding of differences in others, these beliefs will only perpetuate into adulthood and end up leading to actions such as those which have occurred on campus.

Luckily, one program is working on helping teachers learn how to address the issue of diversity with young children. The Virginia Tech offices of Work/Life Resources and Multicultural Affairs collaborated to develop a curriculum to address the importance of helping young children acknowledge, understand, and appreciate diversity. Shared Lives is a set of seven workshops for early childhood educators who want to teach young children to be comfortable with and respect diversity and to fight against unkindness and discrimination of any kind. Shared Lives can be applied to any program for young children and does not require many special materials. Concepts are presented to educators in a practical hands-on style allowing for varying levels of experience with diversity education.

The Shared Lives philosophy is drawn from the Anti-Bias Curriculum (A.B.C.) by Louise Derman-Sparks and the A.B.C. Task Force (1989). Central to the curriculum is the belief that at an early age children absorb and incorporate prejudice based on messages from adults, peers, and the media. In order to counteract these messages, the Anti-Bias Curriculum and Shared Lives stress the importance of teaching young children to acknowledge and be comfortable with differences, and to recognize and fight against discrimination based on those differences.

If you would like more information about Shared Lives or creating an anti-bias curriculum for young children, please contact Cathy Jacobs at jacobsb@vt.edu or 231-3213.

About 'The Conductor'

The Conductor is produced twice during the fall and twice during the spring semesters by the Multicultural Fellows and is published by the Office of Multicultural Affairs.

All members of the university community are invited to contribute. Please submit articles to the editorial board at multicultural@vt.edu.

Back issues are online at http://scholar.lib.vt.edu/viewpubs/spectrum/

Editorial Board

Richard Conners, 231-6989, rconners@vt.edu

Benjamin Dicron, 231-1820, bdicron@vt.edu

Jean Elliott, 231-9195, elliottj@vt.edu

Mahmood A. Khan, 703-538-8398, maulleen@vt.edu

Judith Stone, 231-6983, elizmok@vt.edu

Susan Trudel, 231-5646, atrudel@vt.edu

Production

Roxanna Link, Coordinator of Communications, Office of Multicultural Affairs, 231-2610, rlink@vt.edu

Salem Times Register

Articles for the next issue are due April 13, 2005.
Affirmative action...

Continued from page 1

women, often take three to five years before they can complete their education.”

Clarence Coleman of NSU University Advancement said that the desire not to go heavily into debt is a factor. He added that the National Science Foundation continues to fund Active Affirmative Action programs. “The main issue is preparing the workforce. In the not too distant future, today’s minorities will be the majority. There is keen interest in insuring tomorrow’s workforce in the sciences. Billions of dollars are available through loans, fellowships, and scholarships.”

which raised the issue of the continued role of Historically Black Colleges and Universities (HBCUs).

Joseph Hall, NSU faculty member in chemistry, said, “Racism and prejudice in America are alive and well, and you can overcome it. Why am I at NSU? Having attended a majority university, I saw African American students who could not compete. I was going to Cornell, but a 92-year-old man asked me what I wanted to do. I said, ‘Build.’ He said, ‘You can’t build at Cornell.’ So I’m at NSU. I’m interested in another HBCU.”

“You can’t build at Cornell.” So I’m at NSU. I’m interested in another HBCU.

“Open the door. I’ll get it myself.”

Arlene Macline, NSU engineering faculty member and one of very few African American women in physics, talked about her experience receiving research support and giving it. “We need to build infrastructure to support research. At MIT, if I needed supplies, they delivered. At Hampton, North Carolina State, and NSU, if I want a copy, I have to find the machine and put the dime in. Your reputation changes as you move; it is the institution that has the reputation. When I was on a review panel at NSF, they received a miserable proposal from Princeton, but they were going to fund it, until I pointed out how bad it was. ‘We have to be on the panels.’

Levon Parker, retired minority and special programs officer at NIH, reported progress at his agency. “I am pleased to feel that the future is changing. There are more minorities with training grants and more minorities in top key positions. Three of the 27 NIH deputy directors are African Americans. I see that increasing. More minorities will be principal investigators doing AIDS research and diabetes research. More minorities will be deans and directors. Affirmative Action is going to continue to play a key role. When I went to the NIH, there were no minorities on advisory panels or review panels. Now there are.”

“Wonder why we have to have this discussion on Affirmative Action and its value,” said Ronald Blackmon of Elizabeth City State University. “When you get opportunities, take full advantage of them. You’re doing it for you and for everyone else. As you develop careers, remember you came from an institution where people worked hard for you. Make sure you build a network. Support it. Feed it. It feels good to go places and see people you know. Collaborations could result. It can happen at the personal level and at the institutional level.”

The discussion concluded with observations that more people need to be involved in the political process and creation of resources outside of government programs. Geddis commented that the GEM program is under pressure. Coleman commented that the HBCUs need to work with the majority institutions to identify programs supportive of minorities, since it is not consistent across a university. Parker commented that the majority institutions need to realize that the funding supplements with research grants are to recruit minorities, not to support those already enrolled in science and engineering.

Questions from the audience indicated that today’s scientists and engineers are thinking about tomorrow’s.

One parent reported, “I almost ate the liver of my daughter’s teacher when she said girls are not good in math. Two of the most famous mathematicians are women – but they are not Americans.”

Geddis responded, “The low expectations of counselors and grade school teachers often go unchallenged. Go to your children’s schools; make sure you get the best possible instructor in math. The decision to go into science is made in the fourth through sixth grades.”

Another parent asked How the S01s have impacted middle school teaching in math and science.

NSU math teacher Ron White said, “It goes back to the counselors and their role. S01s don’t limit creativity. They set the minimum that the teacher should cover.”

Patricia Ravenell, NSU biology faculty member, added, “The highest S01s are in schools where parents are involved. Take your kids to the library; participate in summer enrichment. Take affirmative action to enable the students to be self-learners. A teacher can only do so much. If you see a gap, find solutions.”

Reflections:

Sexual orientation discrimination

By Michael Hunt

The following is a journal entry by a Presidential Campus Enrichment Grant recipient from October 2003.

Today’s SGA (Student Government Association) Senate meeting was typical in that we have been dealing with issues that various groups of students on campus have problems with. Today was different in that we were graced with the presence of some members of the LGBTQ (Lesbian, Gay, Bisexual, Transgender Alliance) who were bringing to us an issue of sexual orientation discrimination. As soon as we were told that the SGA to do something about it. It is true that we are supposed to be protecting the rights of students, but does our reach extend outside of the campus? To what extent do we tackle social issues? And why am I so hesitant to support a bill that is anti-discrimination? All of these questions were running through my mind, but the last one is still one that haunts me. Particularly in light of all that I learned in Nations and Nationalities. I have been blinded by the fact that the young lady was a lesbian and couldn’t seem to see past that fact. I am ashamed to say that there wouldn’t have been any hesitation if she had been refused service because she was black, or because she was a woman. The simple fact remained that because I don’t support the style life I was getting ready to support the discrimination of a human being. …

This type of a challenge is not something that I think I could deal with each and every day, but the more that I think about it—how often do we deal with issues and dilemmas like this? We deal with them each and every day, but we don’t get so bent out of shape about them because in our heads and we don’t have to look someone in the eye after making a decision not to support them. This experience has caused me to ask myself, how many times have I sided with evil simply because I don’t agree with someone? How many times do I choose the worst of two evils instead of the lesser? I can honestly say that this experience has caused me to think a lot about what diversity means to me and how diverse I truly am.

DiversityInc available to campus

Virginia Tech renewed its corporate subscription to DiversityInc, a web site launched in 1998. They publish original content on the web every business day. As of January 2004, they had 269,577 registered users.

Content is the core of their mission. DiversityInc’s editorial mission is to provide education and clarity on the business benefits of diversity. Their original content is written by their team of nine full-time, experienced journalists, located in the home office in New Brunswick, N.J. and their bureaus in Washington, D.C. and Los Angeles. It is exclusive to DiversityInc.com and includes regular features on diversity management, best practices, emerging markets, recruitment and retention, leadership, legal issues, and more.

Access is free and easy and is made available to ALI Virginia Tech faculty members, staff, and students through our corporate subscription. To start receiving your free subscription:

2. Using the pull-down menu, select “Virginia Tech” as the corporate plan.
3. Fill out the form, making sure to use your vt.edu e-mail address, and click “Submit Membership Application” once.

Upon submitting the form, a confirmation of your See DiversityInc on page 4
University receives awards for 'Disability Friendly' practices

By Jean Elliott

Virginia Tech joined the growing list of businesses across the state that are being recognized for excellence in providing ‘disability friendly’ practices toward people with disabilities.

Virginia Tech was most recently recognized as recipient of the 2004 Virginia New Freedom Employment Initiative Award, which recognizes leadership among businesses that exemplify excellence in hiring, accommodating, and serving individuals with disabilities. Virginia Tech was heralded as an employer that “embraced the opportunity to strengthen their workforce and the marketplace by hiring people with disabilities.” The award, which was announced with a full-page ad in Virginia Business magazine, is sponsored by the Virginia Business Leadership Network and funded by a grant from the Virginia Board for People with Disabilities.

Last year, the university was presented with the “Disability-Friendly Business” Award to recognize efforts in actively recruiting persons with disabilities in its workforce and for making the campus accessible to employees and students with disabilities.

This recognition program was created to acknowledge businesses that have gone beyond the legal compliance of the Americans with Disabilities Act (ADA) and embraced the talents that people with disabilities contribute to the workplace and to the community. The Virginia Department of Rehabilitative Services and the Virginia Business Leadership Network sponsored this award.

Virginia Reilly, Virginia Tech ADA coordinator, commented, “We are so fortunate here at Virginia Tech to have so many people who care about diversity and disability issues and value all people who help us put knowledge to work.

“For example, Muriel Flynn, in Personnel Services and Bill Sanders in Information Systems and Computing have worked in a collaborative partnership with Woodrow Wilson Rehabilitation Center and the Department of Rehabilitative Services, which has resulted in hiring people with disabilities in technical and computing positions. This program has been supported by the Assistive Technology (AT) Lab, where Bill Holbach and Hal Brackett provide incredible technology to students and employees with disabilities. In Student Programs, Sam Camden has worked to employ a large number of people with disabilities in our residence halls and dining facilities. John Beach and Bill Elvey have trained and employed people in the physical plant and facilities division. Each of our colleges and administrative units employs faculty and staff with a range of disabilities,” Reilly said.

Through the Services for Students with Disabilities office, Virginia Tech serves more than 700 students each semester. Many of those students are also employed on campus and take active leadership roles in programs such as Real World Day and College Bound, a summer program for high school students with disabilities. The High School High Tech program also employs a large number of high school students with disabilities in technical jobs each summer. Virginia Tech is also the southwest Virginia site for the Virginia Assistive Technology System (VATS SW) that provides information and referral for people of all ages with disabilities.

“We are very proud of what our campus is doing,” noted Reilly. “As a large institution in hilly terrain and with historic buildings, this is often a challenge. But my experience has been that there is a willingness to meet that challenge to provide equal opportunities. We have much more to do, and we will keep working at improving the accessibility of our physical environment as well as making our electronic environment and our programs more accessible. The recognition of our community certainly helps keep us going in that effort.”

Recently, Virginia Tech played host to Paul V. Hippolitus, senior specialist of disability programs with the Office of Disability Employment Policy (ODEP) in the United States Department of Labor. He guided discussions with Virginia Tech employees regarding recruiting and hiring individuals with disabilities. He also met with students and talked to them about interviewing and landing that first job. One of the discussions revolved around the best time to disclose a disability in the interview process. Advice from Hippolitus was to “be upfront, use humor, and do it with confidence.”

Hippolitus helped create the Job Accommodation Network (JAN), a nationwide toll-free telephone consultative service providing job accommodation solutions; and the Employer Assistance Referral Network (EARN), a national referral service for employers to locate job applicants with disabilities. He also noted that the Workforce Recruitment Program (WRP) was a program where recruiters interview students with disabilities. Students are profiled on a database and the registry works as a connection to a good summer job.

Some of the most compelling statistics that Hippolitus revealed came from the most recent census - one in five people have some degree of disability and one in 11 have a significant disability. Hippolitus then noted that chambers of commerce and human resource managers are concerned that there are too few workers for jobs in the future. Hippolitus said that persons with disabilities will supply the new labor and be the ultimate solution to a long-term dilemma with a loyal, reliable workforce.

The visit by Paul Hippolitus was part of the celebration of Disability Awareness in Employment month. The event was sponsored by the ADA Office, Personnel Services and the Office for Multicultural Affairs.