Memo from President Jared L. Cohon  
Date: September 30, 2005  
To: The Campus Community  
From: Jared L. Cohon  
Re: The Benefits of Diversity for Education at Carnegie Mellon University

A year ago our university’s Diversity Advisory Council (DAC) commissioned a group of our colleagues to articulate the benefits of diversity vis-à-vis a Carnegie Mellon education. Our Council worked closely with them to create the following manuscript that I believe expresses the value of our continuing work to nurture a diverse educational environment. Student members of the DAC expressed support of the document and felt it resonated with their perspectives. I hope you will take the time to read this report and share the sentiments it expresses with those you come in contact with.

The Benefits of Diversity for Education at Carnegie Mellon

Report Commissioned by the President’s Diversity Advisory Council - Carnegie Mellon.  
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This document reviews the research on the implications of a diverse university community for education, and articulates our values and beliefs about the impact of diversity on the education we provide. The Carnegie Mellon community believes that a more diverse campus is important because diversity broadens the educational experience for all our students. This review and analysis sets this priority in historical, psychological and social contexts.

Introduction

Over the past three decades Carnegie Mellon has risen from regional to international distinction because of our leading-edge research, innovative education and effective use of technology. As we have evolved and attracted students and faculty from across the nation and around the world, we have come to realize the important role that campus culture plays in supporting our standing as a prominent research university and as a citizen in a global society. A prominent feature of the culture we seek is diversity, because diversity broadens the educational experiences of all our students, furthers our competitive strengths, advances our university’s inclusiveness and positions us for influence in a global society. We believe that students who graduate from a university with a diverse population are better prepared for the social, cultural and technical demands of the workplace, and are better able to participate as citizens of local, national and international communities.

The campus culture that we aim to shape will welcome, value and support faculty and students of various ethnicities, religions, languages, colors and perspectives, and create an environment in which men and women can freely pursue their talents and callings in a climate that nurtures their full potential. This culture of diversity will not only celebrate the freedom and vitality to be found in a great American research university, but will allow us to demonstrate leadership both within our own nation and in the international arena. Only a diverse campus community can offer our students a model of the workplaces and polities in which we expect them to exercise leadership in the years after graduation. We need to prepare them for such environments by making Carnegie Mellon itself a model of inclusion and respect for differing perspectives and diverse ways of living, learning and flourishing. Furthermore, we expect our students to carry this model of inclusion forward to improve their own workplaces and life experiences.

Strategic planning has been key to our success as we have sought a comparative advantage through deliberate focus in fields that range from the fine arts, humanities and social sciences to engineering, the physical sciences, business and public policy. The focus on niche sub-disciplines that has made us a leader in many areas (e.g. Cognitive Neuroscience, Engineering and Public Policy, Bayesian Statistics, Computational Finance) has been balanced with our interdisciplinary approach to research and education. Educational planning has turned our comparative advantages within singular disciplinary “niches” into a wide-ranging multidisciplinary strength.

The same tenacity that has brought us this far is now further required as we engage in a process that takes our institution to a higher level of inclusion. The Board of Trustees, President, central administration and many faculty are committed to diversity as a strategic priority. Without this commitment, we cannot maintain our international influence or assure the greatest potential for success among our students.

The commitment to diversity has been renewed and deepened over the last decade, but the process began before the Second World War. Over the past 70 years, the Board of Trustees, the President and central administration—as stewards of the mission and interests of our university—have acted to advance the diversity of our population and develop the supportive base of our campus culture. In the 1930s we removed quotas against the admission of Jewish students, a generation ahead of our peer institutions. In the mid-1960s we joined other research universities in further diversifying our student population through an affirmative action program for underrepresented minorities, mainly African Americans. In the mid-1970s Carnegie Mellon developed and implemented a federally approved affirmative action plan for the employment of women and minorities. In the 1980s we began an effort to increase the recruitment of Asian, Asian American, Hispanic and African American faculty. In the 1990s we increased our international student population, instituted domestic partner benefits and, at the end of the same decade, began to increase significantly the number of women admitted in many fields of engineering and the sciences. This broadening of our population has itself become a catalyst for further diversity efforts.

Our resolute progress toward greater diversity over the past 70 years has, at times, been slow and uneven. Yet, through it all we have maintained our commitment to a culture that supports tolerance, mutual respect and inclusion. The success of our efforts to build and reinforce this culture of diversity will critically depend on our ability to recruit the kind of faculty, staff and students who can create and sustain such a diverse community, and who consider it a privilege to be part of a community that is international, diverse and demanding.

This document articulates our values and beliefs about the impact of diversity on the education we provide. We first describe the scope of the education we seek to provide and our goals for inclusiveness. We then describe the historical setting that places our institutional efforts in a national context. Finally, we discuss the scholarly literature that supports an investment in a diverse university community and culture.
I. Defining Education and Diversity at Carnegie Mellon

To proclaim their shared leadership, our educational philosophy focuses on the total, or holistic, development of students as people. Students develop in many dimensions during their four years at Carnegie Mellon University: intellectually, cognitively, socially, emotionally, culturally and psychologically. To help them learn and grow in all these dimensions, we strive to immerse our students in an environment that is conducive to learning in both the classroom and outside the classroom. Our responsibilities as educators include providing content and context, promoting professional and personal growth, supporting career planning and the development of skills, and fostering the ability to negotiate a complex and dynamic social world. We want our graduates to have the desire, confidence and skills to learn and grow throughout their lifetimes.

Building on our traditions of innovation, problem solving and interdisciplinary collaboration, we educate with an eye to the future, to help our students realize their dreams by developing their understanding and appreciation of the importance of people of different cultural and social backgrounds. This is because the world of the future will be a world that is global and diverse.

We hope to foster in our students a commitment to quality, ethical behavior, society and respect for one another. We have developed a curriculum with a focus on interdisciplinary teamwork from our longstanding commitment to educate through familiarity with and understanding of real-world situations. This environment of authentic, collaborative problem solving helps students discover the value and benefit of observing the world from multiple perspectives. For those disciplines and activities where creative processes seemingly happen in a solitary way—such as writing poetry or designing a chair—we strongly believe that the broad education we offer, the open exchange of ideas we promote, our urban setting and the diversity environment that fosters exploration, discovery, creativity, design and invention; we want our students to be at the forefront of enhancing the quality of life, whether through a work of art, a robotic arm or a better understanding of the human mind.

We aim to prepare students for the complexity and diversity of our society—to recognize, value and learn from heterogeneous cultures, communities and perspectives. Our goal is to develop a fundamental respect for different ways of living, working and learning. Valuing diversity goes beyond a simple tolerance of different backgrounds and approaches: it recognizes, appreciates and facilitates the processes involved in the exploration and discovery of the unfamiliar, allowing for a variety of ways to think about and communicate ideas. Furthermore, valuing diversity makes for stronger affiliations within our community and enhances our ability to be effective in an increasingly complex and pluralistic society. Students must understand and respect people and ways of life that are different from their own because this is the world in which they will live and work.

Diversity expands and enhances what we already do. By increasing our comfort levels with differences, we increase our flexibility to learn in different ways and to enrich our experiences, both educational and otherwise. Diversity encourages critical thinking and increases communication across cultural borders, and helps to forge relationships. Diversity of views and perspectives is important at any university, but especially at Carnegie Mellon, which relies so heavily on collaboration as a basis for innovation. Fostering mutual respect for our differences strengthens our university community.

Learning to navigate a rich array of diverse communities is a life skill needed for any person in a world brought together through technology and ease of travel and communication. True exchange of ideas—a key to innovation and progress—requires sensitivity to and understanding of others’ views, values and ideas. The diverse community at Carnegie Mellon provides an ideal setting to develop these skills.

II. Diversity: A Historical Perspective

As Carnegie Mellon further develops and articulates its diversity mission, we take heart in the progress that the nation and the university have made over time, but we must also confront and address the complex and stubborn persistence of inequality along the color line. Since the Revolutionary War, U.S. history has been characterized by two large, interrelated themes: 1) sharp internal ethnic, nationality and cultural conflicts and 2) the gradual mediation of such conflicts through the creation of a more inclusive multicultural and democratic nation. When the U.S. embarked upon its political career with the Declaration of Independence in 1776, it did so with huge gaps between its democratic promises and its actual slaveholding, predominantly white male-dominated republic. Government by, for and of the people would take years to perfect. It remains imperfect, but it retains its promise as a model for a multicultural democracy. In less than two centuries, America expanded the franchise to landless white men, formerly enslaved African American men and to women of all ethnic and racial backgrounds. America’s ability to respond to ongoing social conflicts by broadening the base of democratic participation and civic engagement should inform Carnegie Mellon’s current effort to create a more inclusive multicultural university.

In the wake of the American Revolution, the nation did little to reverse the earlier system of inequality. The new nation continued the removal of Native American classes and embarked on the institution of slavery, subordinated women and disenfranchised the masses of landless white men by imposing property qualifications on the right to vote. It was during this period in the nation’s history that rising numbers of white workers adopted the term “white slavery” to describe their lot, but drew a careful distinction between themselves and enslaved blacks.

From the early years of the nation, white workers waged a relentless struggle to gain equal rights. By the 1820s and 1830s, the nation responded to the demands by white property qualification campaigns and encouraged race and white men. For their part, some four million enslaved blacks gained their freedom in the wake of the Civil War. Following passage of the 13th, 14th and 15th Amendments to the Constitution, for the first time in the nation’s history all black men were entitled to the right to vote in the North and South. The emergence of Jim Crow laws during the late 19th century undermined this process of democratization across the color line, but the emergence of the modern civil rights and black power movements of the post-World War II years dismantled the system of Jim Crow through passage of the Civil Rights Acts of 1964, 1965 and 1968.

Under the umbrella of the modern civil rights movement, women, Hispanics, Native Americans and gay rights activists also accelerated their assault against various forms of political, institutional and cultural injustice and inequality. Although women had gained the right to vote in 1920 and American workers had gained a New Deal and civil rights, the movements failed to address the racial and gender divisions of American society. As such, they left unfinished the work of creating a multi-racial and gender-integrated democracy. By the late 20th century, however, the nation had made substantial progress toward incorporating diverse ethnic and nationality groups as well as women into the body politic. It was now not only necessary for citizens to avoid racial and gender discrimination but to take “affirmative action” to ensure equitable treatment of women and minorities in American society. In short, America had finally started to address its “unfinished revolution” of full citizenship rights for women, black Americans and a variety of other ethnic and racial groups.

As a result of our history, America is a diverse society. To succeed in its democratic promise, America needs to assure that qualified students can gain access to high quality education. We at Carnegie Mellon have been at the forefront of efforts to assure such access, and our current strategic priority continues our trajectory toward a more inclusive campus.

III. A Demographic Perspective

The issue of broadening inclusion is imperative given the country’s current population projections. The country’s population has increasingly characterized the U.S. population over the last century: in 1900 one in eight Americans was of race other than white, while by 2000 the ratio was one in four (U.S. Census Bureau, November 2002). The past 30 years is largely responsible for this increased diversity, as the population of races other than White or Black grew by the year 2000 to be comparable in size to the Black population. Between 1980 and 2000, the aggregated Minority population (defined as people of races other than White and people of Hispanic origin) increased by 88%, and the Hispanic population doubled. By 1980, Hawaii and the District of Columbia were more than 50% Minority, and by 2000 California and New Mexico reached that marker as well. Texas is close, with a 48% Minority population.

Carnegie Mellon’s demographics are not as striking as national demographics, yet we’ve made slow and steady progress over the years. In 1976 we had only 4.8% minority undergraduate students, and in 2003 we have 10.8%. Similarly, we’ve grown from 6% minority faculty in 1979 to 14% today. Staff positions don’t show much overall movement between 1979 and 1993 (178 and 183, respectively), although there has been a shift: a decrease in the number of minority service and maintenance workers and an increase in the number of minority staff in executive, administrative, professional and secretarial/clerical positions.

IV. The Educational Benefits of Diversity

On a scientific level, diversity carries significant value across a number of complex social and biological systems. For example, biodiversity within ecosystems, genic diversity within species, and the diversity of holdings within economic portfolios all convey advantages that result in strength, breadth of resources, resilience to challenge and increased viability. While we strongly believe that diversity has inherent moral and social value on the college campus, we also recognize that like the benefits it delivers in
other complex systems, diversity conveys a host of benefits in higher education. Indeed, research from the social sciences has identified a number of specific ways in which students who attend universities with a diverse student population benefit in comparison to students with homogeneous student populations. For example, studies have shown that students in diverse classrooms are more likely to develop critical thinking skills and to be more open to new ideas and perspectives. In fact, diversity has been found to have a positive impact on students' academic performance and overall well-being. For instance, research has shown that students in diverse classrooms are more likely to develop empathy and tolerance for different viewpoints, which can lead to improved academic outcomes. Additionally, studies have found that students in diverse classrooms are more likely to develop leadership skills and to be more effective communicators. Overall, the benefits of diversity in higher education are significant and should be embraced by institutions of higher education.

As a starting point in examining the benefits of diversity to university students, it is useful to place the college years in the context of broader psychosocial development. Many educational scholars argue that the college years represent a distinctive developmental phase that lies at the interface between adolescence and young adulthood (Astin, 1977, 1993; Feldman of learning environments. By interacting with students who have different cultural backgrounds and life experiences, students are inevitably faced with new perspectives and views that differ from their own. This contact provides ongoing opportunities for students to question, articulate and expand their own beliefs. As a result, on average those students who interact with diverse others develop higher levels of critical thinking and active thinking skills (Gurin et al., 2002; Pascarella et al., 1996) and demonstrate greater engagement and motivation (Gurin, 1999; Gurin et al., 2002; Gurin et al., 2004). In addition, students on diverse campuses generally experience enhanced classroom discussions (Orfield and Whitha, 1999) and develop a greater ability to understand diverse perspectives (Gurin,1999; Gurin et al., 2002; Gurin et al., 2004).

In addition to fostering critical thinking and providing opportunities to view problems from multiple perspectives, campus diversity may teach students to more effectively negotiate and function within complex social and occupational environments. Given the changing demographics of the United States, the increasing diversity in the American workforce, and the growing nature of the global marketplace, this is a critical skill that prepares students for life after graduation. In fact, global corporations like General Motors, 3M, E.I. Du Pont de Nemours & Co., Intel Corporation, Microsoft, Texaco, and Proctor and Gamble have clearly articulated that it is essential that students be educated in an environment in which they are exposed to diverse ideas, perspectives and interactions (Amici Brief, Briefcase, Inc., et al., 2000; Amicus Brief General Motors Corporation, 2003). These companies maintain that the diversity that universities provide contributes significantly to students’ abilities to live and work together and communicate across boundaries—a value they embrace given that “no one…can afford to think in purely local terms” anymore (Amici Brief MIT et al., 2003). Moreover, these companies believe that diversity will help students learn to be more innovative ideas and produce as do William A. Wulf, President of the National Academy of Engineering (1999) and Neal Lane, former Director of the White House Office of Science and Technology Policy (1998).

The ability to skillfully navigate complex and diverse social environments requires more than simply identifying a set of rules or guiding principles from a textbook or lecture. Although classroom discussions and readings about different perspectives can enhance these social and interpersonal skills, they are developed, internalized and reinforced through implicit learning experiences that can occur within the context of direct exposure to a diverse social environment. What is critical here is not just diversity in a structural or demographic-sense, but interactions that facilitate the sharing of ideas, experiences and perspectives among diverse groups. Indeed, on average those students with greater exposure to this type of diversity have higher levels of racial and cultural awareness (Amici Brief, 1999). Greater exposure to racial understanding (Milem, 1992, 1994) and more openness to diversity and challenges (Pascarella et al., 1996).

Social justice concerns and U.S. history alone are sufficient grounds to support diversity in university admissions processes. On ethical grounds, the learning level of national and international violence and intergroup conflict, and the persistent levels of subtle racism underscore the need for a diverse campus population. Certainly, demographic data suggests that for most students in the United States, college provides the first experience of living and learning in a diverse community. As such, the university is uniquely positioned to contribute to the development of a rich understanding of the intergroup dynamics and the impact of those dynamics on individuals. Indeed, research in social science has shown to reduce intergroup hostility, stereotyping and distrust (Amir, 1976; Cook, 1984; Pettigrew, 1991, 1998). By promoting equal status interactions that provide opportunities for group members to know each other as individuals, encouraging a common goal or identity among a diverse student body, and providing support for group equality from authorities, Carnegie Mellon actively facilitates the development of democratic ideals and tolerance for difference. Again, these important values are most likely to be internalized when they are the result of experience rather than through formal instruction. In support of this position, research from the social sciences demonstrates that individuals who engage in cross-racial interactions are more likely to identify common values among diverse groups, recognize that conflict can have value when handled appropriately (Gurin, 1999), and show greater commitment to the goal of promoting racial understanding (Astin, 1993; Milem 1994). Moreover, those with greater interracial interactions also demonstrate more involvement with community and volunteer services, show higher involvement in community action programs (Bowen and Bok, 1998), and are more likely to live and work in racially diverse environments (Gurin, 1999).

Consistent with the research on the educational benefits of diversity, research among a variety of organizations demonstrates that, under conditions that foster positive intergroup interactions, diversity may confer creative and functional advantages. Recent reviews of 40 years of research on diversity and democracy in organizations (Williams and O'Reilly, 1998; Milliken and Martins, 1996) conclude that “diversity appears to be a double-edged sword, increasing the opportunity for creativity as well as the likelihood that group members will be dissatisfied and fail to identify with the group (Milliken and Martins, 1996, p. 403).” Under ideal conditions, diversity can promote creativity and improve decision-making because it enhances knowledge, information, perspective, skills and abilities. These ideal conditions include the ability to manage the possible dysfunctional aspects of heterogeneity in groups (e.g., in-group effects, stereotyping, and less frequent communication). In other words, the advantages afforded by a diverse group can be negated by a view of “otherness” as a deficiency, resulting in stereotyping, polarization and anxiety. Therefore, because the demographic composition of work groups affects group process (e.g., conflict, cohesion and communication), which in turn affects group performance, effectively managing heterogeneous groups is vital to realizing better outcomes (e.g., more creative solutions or decisions).
All of these things do not happen simply because diverse students are thrown together to work and play. We must create the conditions that enable diversity to enhance—not hinder—intellectual and social growth among all students, both within and outside the classroom. The frequency and quality of interactions and the social milieu in which they take place are vital. Environments that foster equal status interactions, afford opportunities to explore the existence of common goals, provide occasion for informal one-on-one interactions, and expose social norms that endorse equality and group interaction are the ones that are most likely to experience the immense benefit that diversity can offer. In other words, we can’t just throw students with vast differences together without any support; we need to teach them how to negotiate those differences and use them to the group’s advantage.

We believe a high-quality education demands a diverse setting; and we are committed to encouraging and supporting its development. Because we define education broadly at Carnegie Mellon, and because we are committed to the holistic development of our students, we aspire for them to excel not only as professionals but also as human beings, devoted to the principles of a multicultural and democratic nation. Because we prepare our students to move through multiple communities in this increasingly complex and opportunity-rich world, we believe they will make a difference.