Increasing Diversity in a College of Education: A Mentoring Program to Attract Underrepresented Populations

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Abstract

Desiring to increase diversity within the college, the College of Education at the University of North Texas, Denton, Texas, established the Developing Scholars Mentor Program, designed to build relationships between undergraduate student researchers and faculty mentors. From this group, three have successfully entered graduate school, while additional students are preparing for entry. Five students have participated in professional presentations highlighting their research. Finally, while one student has had her work accepted for publication in a professional journal, others are preparing their manuscripts or have work currently under review. This article will review program components, outcome goals, and perceived benefits to students and faculty as well as a discussion of future efforts toward increasing diversity.

According to Thomas (1999), diversity consists of a collective mixture of similarities and differences. Based on this definition, in any given situation one must deal with differences and similarities simultaneously, not separately. Diversity can be categorized in two dimensions. These dimensions identify the core characteristics of an individual. The primary dimensions are identified as individual characteristics that cannot be changed. They include age, race, gender, mental abilities, and physical abilities. The secondary dimensions of diversity are characteristics that can be changed or modified. Factors include one's communication style, education and training, ethnic customs, general appearance, geographic location, health habits, income, marital status, parental status, religious beliefs, and work background. These primary and secondary factors are interdependent and add to the complexity of one's uniqueness (Hateley and Schmidt 1997; Reece and Brandt 2002).

Despite the many faces of diversity, educational communities continue to remain largely homogeneous. In fact, the representation of minorities in education-related professions is disproportionate to their presence in classrooms across the nation (Carrasquillo 1996; Lewis 1996). While African Americans, Hispanics, and Native Americans constitute 30 percent of the K–12 population in American schools, only 12 percent of public school teachers and administrators are minorities (Carrasquillo). Further, 11 percent of science and mathematics teachers are drawn from these groups (National Science Foundation 1995). Minority enrollment has increased at colleges and

universities, although a progressive underrepresentation of each minority group exists at successively higher levels of educational attainment (Astin 1982; Illinois State Board of Education 1988). The Texas Higher Education Coordinating Board in its 2001 report, *Closing the Gaps*, discussed the long-term implications of the low participation of underrepresented groups in higher education. Consequently, the Board challenged institutions across the State of Texas to develop strategies to increase representation and success of these groups (Texas Higher Education Coordinating Board 2001).

In Frehill's (2000) analysis of high school and college data, she noted parents' socioeconomic status and lack of college attendance played a role in whether their children attended and completed college. The lower the socioeconomic level and the lower the academic achievement of parents, the less likely it was for offspring to attend a university. This can be attributed, in part, to the unavailability of information about financial aid and parents' inexperience with the university system. Frehill states that students in lower socioeconomic groups have less "cultural capital" and suggests its importance should not be ignored. For example, in her study, she found that "students with at least one parent who went to college ha[d] access to more information about successful strategies for getting from high school to college, based on the knowledge provided by one or both of their parents" (Frehill 2000).

Frehill's (2000) work confirms that of other researchers (Higginbotham and Weber 1992; Anschaffenburg and Maas 1997; Coleman, Hoffer, and Kilgore 1982) who linked parents' socioeconomic and educational levels with a student's attainment of a college degree. Kershner and Connolly explained a low socioeconomic background may include various forms of family instability or stress (as cited in Sarkees-Wircenski & Scott, 1995). Individuals consistently discouraged by the educational system may become alienated and lack the commitment to complete their education. Discouragement might be caused by the student's interpretation of signals regarding his/her academic inadequacies and failures, the student's belief that instructors either do not care or demonstrate little interest in student needs, or the student's perception of the institution's discipline system as being ineffective or unfair.

College completion rates of students from underrepresented populations are lower than those of white students from middle and upper class families (Frehill 2000). One way to increase and retain the number of students from underrepresented populations is to provide opportunities for them to work closely with a faculty mentor in their college. Positive outcomes of mentoring relationships are documented across several disciplines (Caruso 1992; Fagan 1988; Heller and Martin 1992; Macy 2000). In education, mentoring has been used to encourage at-risk high school students to finish high school and pursue college (Brown 1996; Slicker and Palmer 1993), to assist college students in choosing a field of study (Lagowski and Vick 1995), to facilitate the adjustment of first generation college students to college culture (Bedient, Snyder, and Simon 1992), and to ensure minority students' academic success (Brown; Coppock 1995). The mentoring relationship is one that has proven to foster growth and development in recipients and is associated with positive job experiences and

perceptions of tangential opportunities (Turoczy 1996). Likewise, research indicates individuals without mentoring relationships exhibit reduced expectations and lessened degrees of work satisfaction when compared with their mentored peers (Baugh, Lankau, and Scandura 1996).

Mentoring is not a one-way street. Participants in a mentoring program at the University of Minnesota indicated an effective faculty mentor was one "...who was committed to the goals of the program, was willing to serve as a role model, became a friend and resource, and was a proven leader" (Shandley 1989). Other research (Lagowski and Vick) outlined the positive characteristics of a faculty mentor as including such things as compatibility with the student, providing information and references about graduate school, assisting the students in marketing their skills, and being supportive during failure. Research indicates the mentor also benefits from the mentoring relationship through professional growth and the renewal attributable to the advocacy of collegiality, the advancement of leadership skills, and the sharing of power (Luna and Cullen). A primary intent of the program described in this paper is to identify potential students from underrepresented populations and to provide mentoring, research experience, and financial support in order to enrich their educational experience.

UNT College of Education Developing Scholars Program

The College of Education at the University of North Texas, Denton has set as one of its goals to increase the enrollment of students from underrepresented backgrounds. Specifically targeted were students from families with low socioeconomic status and low educational attainment, those least likely to attain a college degree. Located in the North Texas metroplex, the College desires for its enrollment to better reflect the rich diversity of Denton, Dallas, Fort Worth, and the surrounding area. In fact, projections for the state indicate that the largest population growth will be in the urban areas and along the Mexican border. By 2008 this burgeoning population will be largely minority, with Hispanics accounting for 40 percent and African Americans for 11 percent. Increasing the college enrollments of these groups along with other underrepresented groups is key to the continued economic growth of the state (Texas Higher Education Coordinating Board 2001).

Given these rapidly changing demographics, the College of Education asked three questions. First, how do we attract underrepresented populations to our programs? Secondly, once students are enrolled, how might they be supported in order to continue and complete their studies? Lastly, how might students be mentored to prepare them for careers and/or graduate studies? Consequently, the College initiated several projects focused on meeting these goals, one of which was the Developing Scholars Mentor Program. Developed in 1998, this program was designed to create partnerships between faculty mentors and first-generation upper level undergraduate students with financial need.

Program Startup. In 1997, as the College began its strategic planning for the upcoming academic years, one of its goals was to find ways to encourage diversity within the College. Consequently, a proposal from the College was submitted to the University's Provost as a special budget item. Following its review, the proposal was funded for the 1998–1999 academic year and the program began with six students. Today, the resulting mentor program continues to be a permanent line in the College's budget.

Criteria for Participation. The College of Education serves six undergraduate majors in four departments: Counseling, Development, and Higher Education; Kinesiology, Health Promotion, and Recreation; Teacher Education and Administration; and Technology and Cognition. To qualify for the program, participants must be first-generation undergraduate students (i.e., neither parent has completed a four-year degree), be a declared major in any program within the College, and have completed a minimum of 30 credit hours. In addition, due to the nature of secondary teaching certification, students in other majors across the University who are seeking certification (e.g., Arts and Sciences, Art, Music) may also apply. Students must achieve and maintain a minimum 2.50 GPA and be able to demonstrate need by qualifying for financial aid through the UNT Office of Student Financial Aid and Scholarships.

As students apply, they are encouraged to first visit with potential faculty mentors and conceptualize a research plan. Students may, however, apply without identifying a potential mentor. Simultaneously, College of Education faculty are encouraged to volunteer to serve as mentors, identifying potential research projects or projects already in progress for which they might utilize assistance of a Developing Scholar. Once students are selected for the program by the Developing Scholars Mentor Program Advisory Committee, they are paired with faculty mentors for the year of the award.

Program Components. The program works to provide students with instruction and assistance in both empirical research and library skills as well as the opportunity to work with faculty mentors on research projects designed by the student. In addition, students are provided assistance and advice for GRE preparation and test-taking as well as guidance regarding graduate school selection and the admission interview process in the anticipation that these students from underrepresented populations will gain the skills, confidence, and incentive necessary to pursue graduate studies.

Throughout the year, students are required to meet regularly with their faculty mentor at times negotiated between the two as they work to prepare their research proposals, design their projects, collect and analyze data, and develop their results. Scholars are required to submit to the Chair of the Developing Scholars Mentor Program Advisory Committee by mid-September of each year a one-page synopsis of their project. Later, by mid-October, a more developed five to ten page research proposal is required wherein students describe their plan of research. Final project reports are submitted in early April of each year. Later that same month Scholars participate in a research

poster presentation attended by faculty, students, staff, and University administrators which serves as the culminating event for the year and where their research is displayed for review and critique.

In addition, during the year of the award the Developing Scholars are required to participate in four scheduled group sessions, each designed to target a different outcome goal of the program. The initial session serves as an opportunity for Scholars, their respective mentors, and their research agenda to be introduced to each other, faculty, and administrators. In a second group session, held each fall, students meet with representatives from the university library and are given a tour of the UNT library system. In addition, they are trained in using electronic databases and other technologically-based search engines. Scholars are provided searching tips and skills for determining the most effective databases for their research interests—knowledge and skills that may be transferred to any area of academic interest.

In a third session during the fall, Scholars meet with the Director of the College of Education Center for Interdisciplinary Research and Analysis and are introduced to principles of basic statistics and research methodologies commonly used in empirical investigation. While the specifics of each investigation are developed between the student and faculty mentor, the Director remains available throughout the year for advice regarding data gathering, input, and analysis should the need arise. The one-page synopses developed by the Scholars earlier in the semester are shared with both the library representative and the research methodologist to enable them to better assist the Scholars.

During each Spring semester, Scholars participate in a group session led by doctoral students in the College of Education Diversity Scholar program, a mentoring program for doctoral students. The Diversity Scholars provide assistance with the selection and application process for graduate school, preparation for the Graduate Record Exam, and the mechanics of successful admission into the graduate program of their choice. Time in this session is also spent working with the Scholars as they prepare to display their research project and findings in a manner suitable for presentation as a poster presentation.

Incentives. Each student participating in the Developing Scholar Mentor Program is paired with a faculty mentor with whom they work closely throughout the year in an empirical research project. These relationships tend to be very close and supportive, allowing the student opportunities to gain insights into the academic process and indepth mentoring from faculty. In addition, each student is awarded a scholarship for the academic year, with the opportunity to obtain travel funds for professional conferences in the event their project is selected for presentation during that or subsequent years. Students are also provided funds for library research and preparation of their research poster. Finally, students are given shirts bearing the Developing Scholar logo and medallions signifying their achievement as a Developing Scholar.

Faculty serving as mentors for the Developing Scholars receive a small stipend to assist with the research project in which the student is involved. These funds may be applied toward costs related to instrumentation, data gathering, etc. Faculty are also able to apply for limited travel funds for any professional conference presentations related to the project. In addition to receiving assistance with their research from their student mentee, faculty, too, are provided Developing Scholar shirts and medallions recognizing their service contribution to these students and the College as a whole.

Outcomes

At the end of its fourth year, the College of Education Developing Scholars Mentor Program has had 15 students complete the program. From this group, three are presently in graduate programs in their respective fields while additional students are preparing for entry into graduate school. Further, five have participated in one or more state, regional, or inter/national professional presentations resulting from their mentor experience. One student has had her work accepted for publication, three others have articles currently under review, and two more are preparing manuscripts for submission. Each of the 15 students received invaluable help from their College of Education mentor who provided experiences to uniquely prepare them for graduate work and future professional opportunities.

Research topics selected by the students represent the variety of majors offered by the College of Education and the research of its faculty. Students explored relationships with autism and eye color, the long-term impact of divorce on children, strength conditioning in adolescence, leadership training in high school DECA chapters, issues surrounding standardized testing in education, and professional development needs of teachers, etc. One Scholar noted, "I think participation in research from the conception of an idea through the writing of the manuscript helped me most in graduate school. My experiences in the Developing Scholar program helped to better prepare me for writing and proposing a thesis and also helped me to better define my goals in applications for doctoral programs."

Faculty mentors also benefited by their participation in the program through their interaction with the Scholars. Faculty mentors are provided the opportunity to work with students in a more personal way, developing relationships that might not otherwise have existed. Mentors appreciate gaining assistance with research that then allows them to complete their own projects as well as the opportunity to better provide for students an academic experience sometimes missing on larger campuses.

Future Directions

The Developing Scholars Program is further supported through collaboration with other College of Education programs. Also designed to scaffold the higher education achievement of underrepresented populations, the Diversity Scholars Program and the Ronald E. McNair Post-Baccalaureate Achievement Program each offer valuable

opportunities for enrichment of the research and academic experience through participant interaction and cooperation.

Diversity Scholars work with the Developing Scholars on graduate school preparation and research presentation skills. The Diversity Scholars host an annual "Successfully Entering and Surviving Graduate School" workshop for the Developing Scholars. The workshop focuses on graduate school preparation activities, including a general introduction to graduate study, Graduate Records Exam preparation, identification of graduate programs, and graduate application procedures.

Ongoing interaction between the Diversity Scholars and Developing Scholars has offered the undergraduate students an avenue for interaction and collaboration with graduate students who are also from underrepresented backgrounds. Through mentor-like relationships, the Developing Scholars comfortably seek answers and guidance with regard to both academics and research, in that often first-generation college students have concerns related to management of graduate school, university teaching, and the professorate as a career choice. Serving as real life examples of individuals also from underrepresented backgrounds who have achieved high academic levels, the Diversity Scholars naturally facilitate and encourage camaraderie among all the undergraduate research program participants. In the pipeline toward attainment of the doctoral degree and full-time university faculty positions, the Diversity Scholars serve as both valuable sources of information and role models.

In addition, the Ronald E. McNair Post-Baccalaureate Achievement Program provides a comprehensive research experience and faculty mentorship in an effort to prepare participants for successful graduate school admission and attainment of the doctoral level degree. This federal TRIO program aims to increase the number of doctoral level degrees awarded to low-income, underrepresented, and first-generation college students. As participants in both undergraduate research projects are students from "educationally disadvantaged" backgrounds, cooperation among the Developing Scholars and McNair Scholars is encouraged to further support and enrich the scholars' experiences.

Proposed Model

The information presented in this article illustrates the efforts taken by the College of Education at the University of North Texas to increase the enrollment and retention of students from underrepresented backgrounds. As the program begins its fifth year, faculty advisors for the Developing Scholar Mentor Program are seeking ways to both broaden mentorship within the College and enhance the role of the program, extending it to the graduate level. *Figure 1* depicts the proposed model, which would include programs available to support and provide mentoring for underrepresented students beginning with enrollment in the College of Education at the bachelor's degree level and continuing through completion of the doctoral degree. Currently missing in the College of Education's mentoring efforts is a mentoring program for the master's degree student. This progressive model includes such a program for graduate students

and would enable the College to initiate a program similar to Developing Scholars to support first-generation master's students.

Figure 1 Proposed Progressive Model

Developing Scholars Mentor Program -> McNair Scholars -> Master's Mentoring Program -> Diversity Scholars

Successful implementation of the model begins with strategies to increase diversity participation in Developing Scholars. This will include marketing the Developing Scholars program to first year College of Education students and area community colleges, extending a letter of invitation to eligible students to participate in Developing Scholars, conducting orientation sessions with first generation students as they enroll in programs in the College, establishing a five-year plan that determines yearly goals for student recruitment and participation/faculty participation, and forming Developing Scholar teams to recruit from area high schools. Activities might also include encouraging Developing Scholars to recruit from their home high schools by presenting their research at a poster session held during college night as well as inviting area high school counselors to the annual College of Education poster session.

Conclusion

To borrow from W. B. Yeats, "Education is not the filling of a pail, but the lighting of a fire." The Developing Scholars Mentor Program in the College of Education contributes to lighting such fires by identifying quality undergraduate students and providing faculty mentors to encourage the pursuit of graduate work. The Developing Scholar Mentor Program in the College of Education at the University of North Texas works to identify undergraduate students and provide faculty mentors to encourage their pursuit of graduate work. The faculty mentors in the Developing Scholars program provide support, encouragement, and guidance that students have indicated they need to be successful. Although the College of Education Developing Scholars Mentor program is awaiting formal evaluation, its goal of encouraging graduate work and involvement in research among students has clearly been met. As the College of Education works to enhance the human capacity, the Developing Scholars program at the University of North Texas appears to be opening new doors for many of its participants.

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