Abstract: Utilizing a synthesis of retention, behavioral and self-efficacy theories as the framework for the research, this study aims to build on and contribute to the growing body of literature related to the persistence and timely graduation of economically disadvantaged university students. Expected outcomes include the identification of variables that correlate with academic underachievement and attrition among low-income students at a large, public university, and the development of a predictive model that will be deployed to identify those who are at risk so that intrusive interventions may be applied with greater precision.

Issue of Interest to CERPP: Student persistence and graduation rates as a function of the academic experience

Whereas there are multiple theories and much empirical data on the institutional and personal causation of retention and degree completion, there is a need for more published research about the factors that facilitate the *on-time graduation of low-income students* from a four-year, public institution.

Description

In recent years, the average first- to second-year retention rate of Texas freshmen attending four-year institutions has been 73% (The Education Trust, 2006). However, the first- to second-year retention rate of low-income freshmen is less than 50% (THECB, 2006). The common denominator for these Texas students is financial hardship, not gender, ethnicity or first-generation status.

Committed to increasing access for and the academic success rates of low-income students, the University of North Texas (UNT enrollment: 34,153) utilized retention and degree completion models¹, and empirical data to develop and implement its Emerald Eagle Scholars (EES) program which began in the 2007-2008 academic calendar year. Pell-eligible freshmen from households with adjusted family incomes that do not exceed \$40,000 per year are qualified to become Emerald Eagle Scholars and will receive grants for tuition and mandatory fees costs for four years. More than just a financial assistance initiative, however, the program provides acclimation and educational support for academically capable but financially disadvantaged first-time freshmen.

The Purpose: Student attainment of a bachelor's degree in four years with minimal debt.

The Promise: Tuition and mandatory fees paid for four years utilizing federal, state and institutional grants.

The Expectations: Students stay on track to complete a bachelor's degree and graduate in four years by:

1. Completing no less than 30 semester credit hours each academic calendar year;

¹ The UNC Carolina Covenant and the Florida Opportunity Scholars programs, as well as the 2007 Pell Institute study entitled *Demography is not Destiny*, provided examples and benchmarks used in the development and implementation of the Emerald Eagle Scholars program.

- 2. Earning and maintaining a minimum cumulative grade-point average (GPA) of 2.5;
- 3. Committing to active engagement on campus.

UNT's EES access and success program is unique: Nationally, there are many institutional programs committed to improving access and providing a low- or no-debt education for students from low-income families. However, UNT is also committed to supporting and facilitating the Emerald Eagles' on-time graduation, with the goal that this cohort will exceed the current institutional four-year rate of 16.5%. UNT is a public research institution offering 96 bachelor's, 111 master's, and 50 doctoral degree programs, and is presently the fourth largest university in Texas. Emerald Eagle Scholars are representative of the diverse student population at UNT: 37% are African American; 34% are White; 19% are Hispanic; and 64% are female, 36% are male. In its inaugural year, the program serves 408 students and it expects to serve no less than 800 students in year two (2008-2009 academic calendar year).

Research Design

Framework: Since "different theoretical perspectives on student success…account for many of the key factors that shape what students are prepared to do when they get to college and influence the meanings they make of their experiences," (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006) a synthesis of retention, behavioral and self-efficacy theories provide the framework for this study.²

Purpose: This study aims to build on and contribute to the growing body of literature related to the academic success of economically disadvantaged university students, with the added dependent variable of a four-year graduation rate.³

In order to assess and subsequently enhance the efficacy of the Emerald Eagle Scholars program at UNT to facilitate timely graduation, it will be necessary to longitudinally track academic achievement and progression rates of all participants and obtain early predications about participants who are at risk for academic underachievement and attrition.

² Vincent Tinto's interactionalist theory (1993); John Bean's student attrition model (1981); Albert Bandura's self-efficacy theory (1986).

³ Due to the time limits of the grant, four-year graduation rates will not be reported. Instead, demonstrated progress toward on-time graduation will be evaluated and described. The study will, however, continue through 2011 when the four-year graduation rate can be determined for the first cohort of Emerald Eagle Scholars.

Therefore, the goals of this research are threefold:

- The collection of empirical data (i.e. SAT or ACT scores, high school rank, gender, ethnicity,
 parents' education, college major, Advanced Placement credits earned; developmental education
 needs; and first year academic outcomes);
- 2. The identification of variables that correlate with academic underachievement and attrition;
- The development of a model to predict academic underachievement and attrition of Emerald Eagle Scholars.

The questions that guide the research are as follows:

- 1. Is there a statistically significant correlation between identified variables and GPA or persistence?
- 2. What factors provide an early indication of the potential for academic underachievement and attrition?
- 3. What do the students perceive to be the most and least helpful expectations and interventions offered by the EES program to facilitate their academic success?

Utilizing research results, the program will deploy or modify interventions to more effectively facilitate the persistence and on-time graduation of low-income students, with particular attention to the unique needs of those Emerald Eagle Scholars who are identified as being at greatest risk for underachievement and non-persistence.

Method: Descriptive, inferential and qualitative analyses will be used in this study of the Emerald Eagle Scholars program serving its first cohort of students (n=408). Student variables (SAT or ACT scores, high school rank, gender, ethnicity, parents' education, college major) and first-year academic outcomes will be documented. Emerald Eagle Scholars will be surveyed using the Noel-Levitz College Student Inventory (CSI) and in focus groups about their study and social habits, about their level of engagement with the university community, their level of commitment to timely degree completion, and for subjective input about the program requirements.

Procedures: Descriptive analyses will include: percentage of first-generation students in the program; gender distributions; ethnicity distributions; measures of academic readiness for college (i.e. average SAT

and ACT scores; high school rank distributions; Advanced Placement credits earned; developmental education needs); enrollment distributions across UNT colleges and schools; and statistics for GPA and course completion rates.

Inferential analyses will include: t-tests for differences between students that achieve or exceed the requirements for academic success in their first year and those that do not; ANOVA and correlation between CSI results, GPA and first to third term persistence; factor analysis; and regression.

Qualitative analyses will include: a cross case analysis approach to generate themes emerging from students' overall perceptions of the program; and a summative evaluation of the program.

Timeline

The collection of student variables data began in July 2007 and continues term-to-term. Focus group activities and the administration of the CSI survey will take place in April 2008. Statistical and qualitative analyses will begin in June 2008 and continue through September 2008, in conjunction with the ongoing collection of empirical data (i.e. students cumulative GPA and semester credit hours completed in year one; and retention rates in year two). The predictive model will be developed in October 2008 and any indicated programming changes to further assure the academic success of Emerald Eagle Scholars will be implemented in January 2009. Initial findings will be reported and presented in February 2009.

Outcomes

A faculty and staff team will propose presentations of the research results to various regional and national conferences including the First Year Experience conference, AACRAO's Strategic Enrollment Management conference, National Academic Advising Association conference, American Education Finance Association meeting, American Educational Research Association, and the National Association of Student Financial Aid Administrators conference among others. Funding for ongoing research will be sought from the Texas Higher Education Coordinating Board and Texas Guarantee, with the intention of continuing this study to track the four-year graduation rate of the first cohort and to test and refine the model developed in this study.

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⁴ The efficacy of the predictive model will be evaluated and the Emerald Eagle Scholars' academic progress will be tracked beyond the time limits of the grant.

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