

- **Project Title:** An Analysis of Factors Affecting Academic Performance of College Freshmen

Investigator: Doug Morrish

Department: Agriculture

Project Summary:

Agribusiness and related industries currently employ over 17 percent of the U.S. labor force (United States, Department of Agriculture, 2000). The demand for professionals in the field is expected to continue to grow, given increasing emphasis on liberalized trade in agriculture around the globe. To meet this increasing demand for food and agricultural sciences graduates, we need to make sure that sufficient numbers of students are completing their degrees in the field. One way to ensure this completion is to assure success at the freshman level classes because low grades in the early required classes account for much of the attrition. The attrition rate in agriculture at Texas State University ranged from 21% to 35% of the freshman class during the 1999-2004 period (Texas State University, 2006).

We collected data on the following variables from students in agriculture at the end of their freshman year: GPA, SAT or ACT score, high school GPA, high school agriculture completer or non-completer, scholarship, loan, hours of labor force participation, number of credit hours, attendance in classes, gender, hours of studying time out of classroom, and participation in extracurricular activities.

We are in the process of using multiple regression analysis to analyze the collected data. Earned GPA at the end of the freshman year will be used as a proxy for academic performance, the dependent variable in the regression equation. Finally, stepwise regression analysis will be used to find the best predictors of academic performance of students in agriculture.

Publications:

Morrish, D. & Angirasa, A. (To be submitted). An Analysis of Factors Affecting Academic Performance of College Freshmen. North American Colleges and Teachers Association (NACTA)Journal.

Presentations:

Morrish, D. G., Garza, N., and Angirasa, A. (2007). Increasing multicultural diversity in agriculture through educational partnerships. Abstract "Proceedings of the American Association for Agricultural Education Southern Region".

2.) Morrish, D. G., Garza, N., and Angirasa, A. (2008). Increasing multicultural diversity in agriculture through educational partnerships. Abstract "Proceedings of the American Association for Agricultural Education."

3.)Morrish, D. G., Garza, N., and Angirasa, A. (Accepted for presentation 2007). Increasing multicultural diversity in agriculture through educational partnerships. Poster Presentation - American Association for Agricultural Education "Southern Region."

4.)Garza, N. & Morrish, D.G. (2007). Increasing multicultural diversity in agriculture through educational partnerships. Presented to United States Department of Agriculture. Washington, D.C. Funded proposals banquet.

External Grants Applied:

Garza, N., Morrish, D.G., Angirasa, A., Pollard, G., and Quintanilla, Y.Q. (2007). Increasing Multicultural Diversity in Agriculture Through Education and Partnerships. USDA Hispanic Serving Institutions Program. Amount: \$440,000.

External Grants Award:

Garza, N., Morrish, D.G., Angirasa, A., Pollard, G., and Quintanilla, Y.Q. (2007). Increasing Multicultural Diversity in Agriculture Through Education and Partnerships. USDA Hispanic Serving Institutions Program. Amount: \$440,000. (Funded).

Student Number: 2