

Summary

This article provides needed answers to questions about the recruitment and retention of minorities in graduate school programs. It prescribes ways to improve the transition from undergraduate to graduate studies. The article also provides teachers, counselors and advisors suggestions for individual student involvement in facilitating the process.

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Minority Apprenticeship Program

Boosting Agriculture and Natural Resources Enrollments

Eugene E. Trotter

Problem

Agriculture and natural resources industries are major employers throughout the world. Technological changes have increased the demand for college educated employees in these industries. Additionally, societal changes have increased the demand among both private and public employers for competent minority employees.

Yet, minority student enrollments in colleges of agriculture and/or natural resources at land grant universities historically have been low. Many explanations have been offered, but the greatest single factor seems to be a lack of awareness among minorities of the broad range of employment opportunities available to graduates of these college programs.

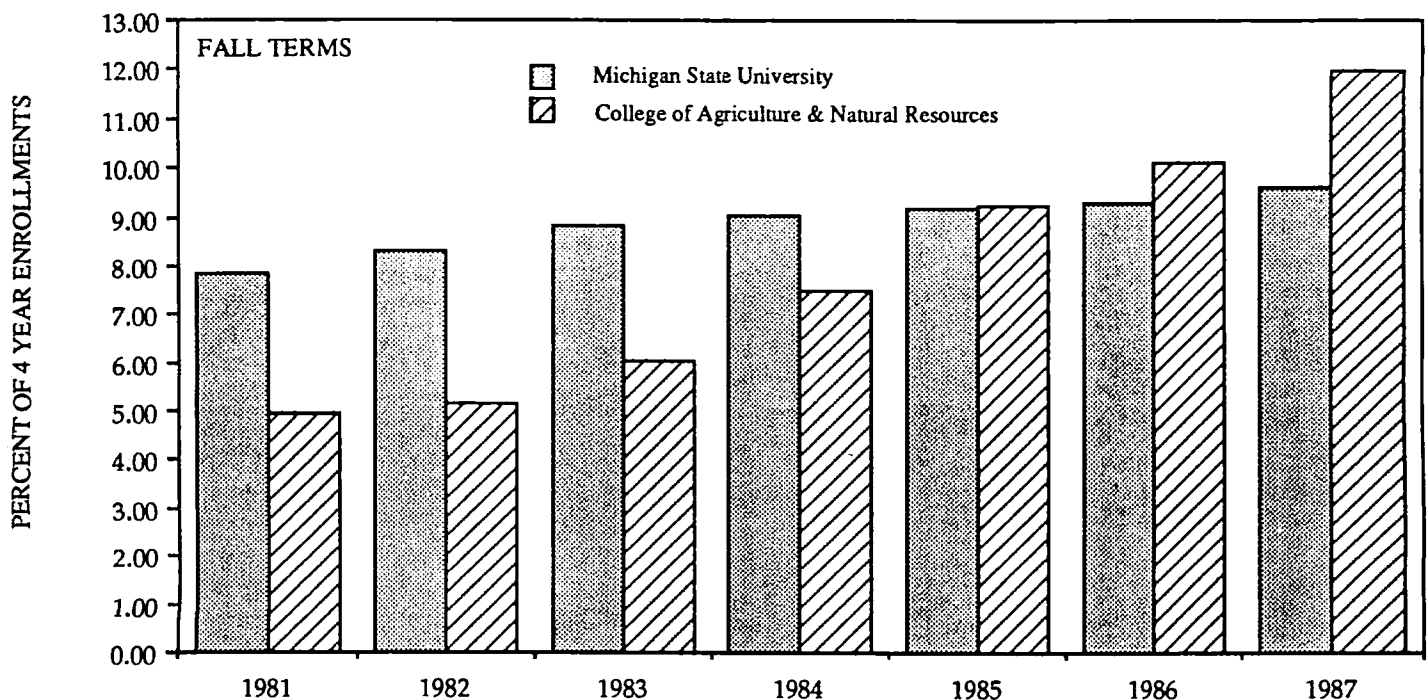
Solution: MAP

Operating on the theory that heightened career awareness boosts student enrollments, the College of Agriculture and Natural Resources at Michigan State University designed the Minority Apprenticeship Program (MAP) to inform minority high school students of careers in agriculture and natural resources. The intent of the program is to encourage minority students to pursue college degrees that will prepare them for employment in these careers.

In the five years since the program began, minority enrollment percentages in the college have doubled (see Table 1.)

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Table 1. Undergraduate Minority Enrollments at Michigan State University.



MAP Goals

The MAP goals are to provide minority students with

1. an awareness of the wide array of career opportunities in agriculture and natural resources.
2. preprofessional, hands-on experiences
3. leadership development training
4. exposure to the skills needed to compete in the workplace
5. a precollege, campus living experience
6. assistance in adjusting to social and academic demands of college
7. financial assistance for their college educations.

MAP Team

The MAP administrative team consists of a director and a coordinator. Both are staff members in the College of Agriculture and Natural Resources. The director, who is quarter time, has overall responsibility for the program and works with the advisory board to determine policy and budgetary guidelines. The coordinator has full-time responsibility for the day-to-day operations, including recruitment, selection and the seven week summer program.

Representatives of the private and public sectors play an integral role in making MAP successful. Executives from both sectors serve on a 12-person advisory board that meets semi-annually on campus to establish MAP policies. Further, these executives from throughout the central region of the United States volunteer to conduct evening leadership seminars during the seven week experience. Many corporations and government agencies provide scholarships, summer internships and financial contributions for MAP.

High school students representing all minority ethnic groups, as defined by the affirmative action office of Michigan State University, are eligible to apply for participation in MAP.

To recruit candidates, the MAP coordinator sends information packets with application blanks to high schools throughout the state. High school personnel are asked to identify students who would benefit from the seven week summer experience.

MAP staff members also visit high schools throughout the central region of the United States which have large minority enrollments. Whenever possible, a former MAP participant accompanies a staff member on these visits, to add credibility and increase the effectiveness of the recruitment effort. During school visits, the MAP team meets with students in math and science classes and visits with teachers and guidance counselors.

The selection of MAP participants occurs as follows:

1. Interested minority students are encouraged to apply. They must provide a completed application and at least two letters of recommendation

(one from a high school counselor) discussing the applicant's academic ability and leadership potential. Further, the applicant is asked to write a brief essay citing reasons for his/her interest in and qualifications for MAP.

2. Application packets are reviewed by a panel made up of the MAP staff and a sub-committee of the MAP advisory board. This panel recommends applicants based on their academic achievements, especially in science/math/communication courses, the written evidence of their interests in agriculture or natural resources careers, and evidence of leadership potential.
3. Recommended applicants and their parents are invited to campus for further orientation and interviews.
4. The MAP staff selects 50 finalists and 10 alternates. All sixty are informed in writing of their selections. It is the individual student's responsibility to return a written acceptance of the invitation. If any of the original 50 cannot accept, a replacement is invited from the alternate list.

The 1987 MAP participants exemplified previous summer groups. The 47 participants included 16 men and 31 women. Thirty-one students were black and the balance were Hispanic, Native Americans, and Asian Americans. Most came from Michigan, with some from New York, Arizona, Illinois, and Missouri. Some 24 high schools were represented. The group's high school grade point average was 3.35. Most participants had completed 11th or 12th grade and about 25 percent indicated an intent to attend Michigan State University, upon graduation, to pursue a degree in agriculture or natural resources.

High school students come to the Michigan State University campus to participate in a seven week preprofessional work experience.

The campus dormitory is MAP students' home away from home. Adults, primarily public school teachers and counselors, are employed as counselors to assist MAP students in adjusting to campus living and the academic demands of college.

The students are encouraged to spend weekends on campus participating in planned activities such as dances, movies and shopping.

Each MAP participant works with and is supervised by a professional from either the Michigan Department of Agriculture, the Department of Natural Resources or Michigan State University. Each professional is selected based on her/his ability to interact with people, willingness to share expertise on a one-to-one basis, interest in the MAP philosophy and area of professional expertise.

During the preprofessional experience, MAP participants become more aware of:

1. responsibilities of a specific career and related careers
2. the philosophy and professional ethics related to that career
3. the work environment related to that career

Each student is challenged intellectually by being given the freedom to experiment with new ideas. The student has a chance to practice the principles he/she learns.

Twice a week from 7-9 p.m., participants meet for a series of leadership seminars. These sessions are led by visiting executives representing major corporations and governmental agencies throughout the midwestern region of the United States.

Seminar topics range from employer expectations of employees, to time and money management, to careers and educational programs in agriculture and natural resources at Michigan State University.

Three one-day field trips are taken to give participants an opportunity to see in action the principles and practices they've learned during the seven weeks. Examples of these trips include touring corporate headquarters, food processing plants and farms of various commodities.

The final activity of the seven week experience is a banquet for the participants, their parents, the MAP advisory board, and the professionals who shared their expertise. A renowned minority professional is invited to deliver a keynote speech that challenges MAP students to further their educations in order to advance in the world of work.

MAP Fund-raising

MAP has developed and expanded through the financial support of key corporations and public agencies. The university has been responsible for administrative staff salaries and related expenses, and outside sources have covered costs of student recruitment, selection and the seven week summer experience.

Results

As stated in the beginning of this article, MAP has a two-fold mission:

1. To make more minority students aware of the vast career opportunities in areas of agriculture and natural resources.
2. To enroll and graduate more highly qualified students in degree programs in the College of Agriculture and Natural Resources.

MAP is, indeed, achieving this mission as illustrated in the chart on undergraduate minority enrollment patterns in the college and the university. During Fall Term 1986, the college actually enrolled a higher percentage of minority students than the overall university.

While it is too early to effectively evaluate the MAP program's impact on minority student graduation rates, the future looks bright as more talented young minority students find their niches in agriculture and natural resources careers.

Is There Still A Place for 2-Year Tech Programs?

James E. Young, Jr.

Introduction

The philosophy on which Land-Grant institutions were founded, is still alive today! This basic philosophy which enables all people a right to an education is very much alive at the Institute of Agricultural Technology (Ag Tech) 2-year program at Michigan State University. The program has continued to provide a technical education for students since 1894, in order to meet industry demand for technically trained individuals.

The name "short course" was originally used to distinguish this 2-year program from the long course which was used among the rural people to describe the 4-year college program. The 2-year program was based on the premise that it was not possible or practical for every farmer in the state to receive a four-year college education. The "short course" movement agreed with the basic philosophy of the Land-Grant colleges and carried on the idea of practical training to reach people actively engaged in agricultural enterprises.

Courses were designed to last from two weeks, up to two years and covered all areas of practical agriculture. Initial admission requirements ranged from good moral character, over fifteen years of age along with no entrance examination, to eventually an adjustment in the age requirement. In 1914, to avoid attracting students away from high school, the minimum age required was raised to seventeen. It wasn't until 1950 that it was necessary to have a high school diploma. Today, to be a part of this unique educational program one must have a high school diploma or equivalent, with a GPA of 2.0 or greater. Related work experience to the technical program is also recommended prior to enrolling.

Eleven program areas exist today which include Dairy Production, Livestock Production, Horse Management, Crop Production, Fruit and Vegetable Production, Commercial Floriculture, Electrical Technology, Agribusiness, Landscape and Nursery, Veterinary Technology, and the Turfgrass Management program. These programs expose students to the latest advances in research and technology. Courses are designed to enhance the students ability to solve problems and learn new techniques through "hands-on" experiences. After two, ten week terms on campus, students apply their knowledge out in industry while acquiring additional job related skills. This very important part of their educational program, "placement training," allows

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