# RECRUITING PARTNERSHIP for CONSTRUCTION ENGINEERING TECHNOLOGY

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## Abstract

The construction industry is in the midst of a critical shortage of qualified employees. This includes management personnel with college training in construction related programs. Future forecasts for construction activity are high and the current employee shortage is expected to continue.

University construction related programs exist on many campuses with over 20 accredited baccalaureate programs nationwide. The Construction Engineering Technology (CET) program at Murray State University (MSU) has existed since 1970. After several unsuccessful years of recruiting freshmen into the program using traditional methods such as: written correspondence, telephone calls, and high school visits the CET faculty at MSU needed to try a new approach. During the spring of 1999 in cooperation with the education committee of the local Associated General Contractors a joint recruiting plan was developed. An innovative marketing effort that included contractors and MSU faculty was taken to the largest high schools in the region. Large increases in freshman enrollment occurred in the fall class of 1999 and by the fall of 2000 the freshman enrollment had doubled in the CET program at MSU.

The marketing effort has demonstrated the ability of a partnership between industry and education to the benefit of both. More graduates entering the local workforce, more internship opportunities and less on-campus concern for the CET program should be positive benefits to increased enrollment.

## Introduction

Construction is the second-largest industry in the nation, employing approximately 8 million workers who will construct \$8 billion in new structures this year, according to the Bureau of Labor Statistics (BLS). Construction contributes 8% of the total gross national product and represents 11% of all businesses.

Unfortunately, many young people do not recognize the important role that construction plays in our society. Nor do they understand the many opportunities the construction industry provides for college trained professionals. It is the challenge of the construction industry and the universities to encourage the high school students of today to consider careers in construction. Enrollment in engineering and engineering technology programs has been a concern since the

early 80's.

## Past Recruiting Efforts

Recruiting students for the Construction Engineering Technology Program has always been a top priority for faculty and administration at MSU. Enrollment data and trends play a critical role in the decision making process for a university program. Past recruiting efforts were varied and sincere but often times were more time consuming then effective.

Written documents were always included in a recruiting plan. Departmental and program brochures are printed and updated on a regular schedule and at a very high cost. To personalize the recruitment effort telephone calls were made both by faculty and students in the CET program. Although somewhat effective the phone calls were not regular and were very time consuming. High school visits by university faculty can take place in a variety of formats. A classroom or laboratory visit with a lecture or demonstration is very common. Engineering technology faculty commonly target mathematics or science classes at the senior level. The lectures and demonstrations can supplement the regular classroom instruction. Conversely, participation in "college nights" by MSU faculty has been less successful. These events are regularly scheduled and attendance is sometimes mandatory but very little productive recruiting is accomplished at these events.

Additional attempts at recruiting were instituted in 1994 by MSU President Kern Alexander. The Roads Scholar program organized teams of faculty, administrators and staff to provide service to 59 high schools in the MSU service region. The teams were assigned to the high schools for the purpose of developing professional relationships with and providing service to their faculty, staff and students. In visiting classrooms and interacting with the students and staff, the university participants become aware of the complexities present in today's high school environment. For the high school students, the visits by university personnel stimulate interest in higher education. The lectures, discussions, and demonstrations provided by MSU faculty enhance the high school educational programs. The program was successful in many ways and it did increase total enrollment at MSU, however, it had little impact on engineering technology enrollments.

#### University-Industry Outreach

The Western Kentucky Construction Association (WKCA), a local chapter of the Associated General Contractors of America, has been a strong supporter of the Construction Engineering Technology program at Murray State since its inception in 1969. Financial support, intern job positions, equipment donations, and scholarships are examples of some of the continual involvement of the WKCA in the MSU program. In partial payment for this support many of the CET program graduates have become valued and productive employees at WKCA member companies.

During the 90's enrollment in the CET program fell despite the faculty's continued interest and involvement in recruiting. During this time the Council on Postsecondary Education in the state was auditing all low enrollment programs and suggesting possible reductions. The Board of

Directors of the WKCA became concerned that the state or the university may reduce or eliminate the program. In another attempt to be of assistance they called a meeting to discuss the problem and possible solutions. Their membership had also been experiencing problems in recruiting craft workers.

A committee consisting of primarily WKCA education committee members and MSU faculty begin to meet and plan a strategy. It became obvious that there were a lot of positives for a high school senior entering the construction industry. Craft jobs meant employment with good pay and good benefits. The Construction Engineering Technology program had a proven record of quality instruction and excellent job placement. This message needed to be delivered to freshman or sophomore high school students. Maybe even to middle school students. However, an immediate fix was needed so the target had to become high school seniors. The problem was it was in the spring of 1999 and many high school seniors had already made decisions about next year. The solution had to be delivered in convincing format that was never used before.

The chair of the WKCA construction education committee was working on an addition to one of the largest high schools in the region. He was a graduate of the MSU Construction Engineering Technology program and had a good working relationship with the superintendent of schools where the addition was taking place. The committee developed a recruiting plan that involved a partnership between construction personnel and university faculty. It also included high school faculty and staff. The focus of the program is to educate the high school students to the career potentials in the construction industry. There were five key elements contributing to the success of the program:

- 1. Identify target high schools
- 2. Early involvement of the superintendent of schools
- 3. Active participation of high school faculty and staff
- 4. Commitment from alumnus
- 5. Student field trip

With a limited amount of time to devote to the project it was necessary to carefully select the target schools. We decided to work with regional high schools that traditionally sent large numbers of freshman to MSU but not necessarily to the CET program. We had worked with these schools many times in the past but our recruiting efforts had produced mixed results. The faculty and staff at the high school knew many of us but knew very little about our program and its' graduates. One of our first steps would be to educate the high school staff.

High school faculty and staff are sometimes reluctant to spend their time on projects outside of primary student instruction. By gaining the confidence and support of the superintendent of schools we were able to initiate our education of the staff. We met with the superintendent and explained the goal of providing local educational and employment opportunities to the graduates of his high school. Once convinced he called a meeting with the faculty and staff where we asked that he provide his full support to the project. Having local construction industry executives in these meetings was critical to the success and commitment of the parties involved.

The initial involvement with the high school faculty and staff was educating them about our CET program and the potential of our graduates. We developed a model CET student both academically and socially. Academically, the model targeted students in the top quarter of their class with math ACT scores between 22 and 25. In addition, we asked the high school staff to identify students who had worked for local contractors. Technology instructors were included to help identify students that had been in their class and shown interest and aptitude. To get them actively involved we challenged them to identify 20-25 seniors that would be candidates for the CET program. Surprisingly it did not take them long to begin to identify students that fit the model.

The committee felt it would be logical for construction industry personnel to talk to the students and explain their job characteristics. It also seemed logical that these representatives be graduates from the Murray State program, and in addition graduates from the local high school. The CET program at MSU has been in existence for over 30 years with hundreds of graduates. Finding an alumnus from the high school and MSU was not that difficult. For the first target high school the chair of the WKCA education committee graduated from there and the CET program. His company was also constructing an addition to the high school.

The construction site is the focus of activity within our industry and it possesses much interest to the public. Because the first target high school had a project on-site it was an obvious advantage. No high school students had been through the project or had much idea about what was being constructed on their campus. The first 25 to visit were very interested and quite excited about being chosen to participate. Other target high school students had to be transported to construction sites. Construction related visits are also beneficial, for example a later field trip took students to one of the largest limestone quarries in the southeast.

The cost of the program was primarily transportation, food and gifts. The individual schools provide transportation of the students when required. The WKCA provided the funds for food and gifts for the students. University, high school and construction personnel all contributed their time spent on the project.

## Conclusions

Recruiting efforts by MSU faculty in the past were always loosely organized and sporadic with very mixed results. We spent an inordinate amount of time describing academic programs and very little on the broad spectrum of careers that is available. Involving construction executives as role models for the high school students is an approach that begins to emphasize the potential for individual success and to make it appear more possible. The lead construction executive was always an alumnus of the high school and the CET program at MSU, giving the students instant recognition and confidence. Even though the alumni were not recruiters they were able to relate and to describe their experiences in high school, college and in business. Some of the recruits made contacts and spent additional time with the alumni, shadowing them on the job and further discussing the profession.

The recruiting effort yielded an increase of 12 percent for the fall 1999 freshman class over the previous year. The fall 2000 freshman class was the largest in over twenty years.

### Bibliography

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