# Journal of INDUSTRIAL TECHNOLOGY

Volume 19, Number 3 - May 2003 to July 2003 Nonn

## Construction Careers Connection

By Mr. John W. Searles and Dr. James R. Owens

KEYWORD SEARCH

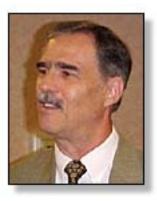
Administration Construction Curriculum Research

Non-Refereed Article



Journal of Industrial Technology

Mr. John W. Searles, M.Ed., is the Director of the Tech Prep Office, located within the Department of Industrial Technology, at Southeastern Louisiana University in Hammond, Louisiana. John has more than twenty-five years experience in education, including six years in supervisory and administrative positions at the Louisiana Department of Education and the Baton Rouge Technical College. He has made presentations at NAIT, ACTE, and NTPN conferences, and has served as a delegate to the ACTE's National Policy Seminar for the past ten years. In addition to his experience in education, John has also worked in the private sector as a Research and Development Engineer for a national instrumentation company.



James R. Owens, Ph.D., CSIT, is Head of the Department of Industrial Technology at Southeastern Louisiana University, in Hammond, Louisiana. Jim has more than thirty years' experience in education, including seven years supervisory experience at the Louisiana Department of Education. Of the thirty years in education, twenty have been at the university level, of which the past sixteen years have been as department head. Within the past ten years, he has secured and managed in excess of 1.5 million dollars in external grants, and conducted twenty national presentations. His areas of publication include Industry-Based Curriculum Guides, Technology Needs' Assessment, Student Recruitment, and National Accreditation.

### **Construction Careers Connection**

By Mr. John W. Searles and Dr. James R. Owens

#### Introduction

Carl Perkins Federal Grants totaling over \$125,000 have recently been awarded to the Department Of Industrial Technology at Southeastern Louisiana University by the Louisiana Community and Technical College System to promote careers in the construction and construction-related industry in Louisiana. The "Construction Careers Connection Project" was composed of a multifaceted approach to exemplify both the "connections" between education and work, and meeting national certification standards, and thereby addressing the needs of the construction industry. The Department of Industrial Technology at Southeastern Louisiana University conducted three-week Construction Careers Academies (CCA) utilizing the National Center for Construction Education and Research (NCCER) Skills Standards as the vehicle for instruction and demonstration. The material was taught in a dynamic manner; it was all hands-on and applications-based. This was no ordinary summer school class; students received a real-world exposure to the construction industry.

#### **Construction Careers Academies**

#### **Procedure**

Through a collaborative effort, seventeen students from the East Baton Rouge Parish and the Tangipahoa Parish Public School Systems were trained on state-of-the-art equipment utilizing industry-based skills standards. During the three-week academies conducted in June, 2002 and 2003, each site constructed a portable playhouse or storage building. Instruction included all areas of the construction industry including: blueprint reading, surveying, site preparation,

masonry and concrete, carpentry, roofing, flooring, electrical, painting, and finishing. Each area followed the standards as outlined by the NCCER. Upon completion of the two construction projects, students were awarded ½ Carnegie Unit of credit toward their high school graduation. Students could also receive three semester hours credit in Construction Technology 101 at Southeastern Louisiana University upon the recommendation of the instructor and approval by the Department Head of Industrial Technology.

At the conclusion of the Construction Career Academies, two statewide workshops were held to discuss in detail the process of how to successfully replicate a model CCA and utilize linkages between a university, a technical college, a community college, secondary educational systems, and partnerships with business and industry. One workshop was conducted at the River Parishes Community College with invited representatives from each of the eight Tech Prep Consortia located throughout Louisiana. This provided an opportunity to distribute documentation and all print and electronic materials necessary to establish CCAs in other regions of the state. Speakers from business and industry participated in this workshop and shared their expertise on skills required to be successful in the construction industry.

#### Industry Needs Assessment

#### Procedure

Another component of the project focused on the collection of data and information on the current and future needs of the construction industry. Five public hearings were conducted at various locations throughout Louisiana (New Orleans, Baton Rouge, Lake Charles, Shreveport and Monroe) to

gather public input to assess the needs of specific construction trades within the construction industry. Over one hundred participants attended the public hearings which included representatives from the following sectors: the Louisiana Governor's Workforce Commission, state level education boards and staff members. parish school systems, post-secondary institutions, universities, instructors of construction-related classes, professional construction association members, chambers of commerce officials, construction industry leaders, and organized labor membership.

Journal of Industrial Technology

To assimilate the information garnered during the public hearings, a twenty-five member panel was formed. This group consisted of selected key individuals committed to the promotion and development of Industry Based Standards (IBS) for the construction industry. The key individuals had either attended one or more of the public hearings, or been involved in the Construction Careers Academies. This panel convened at Southeastern Louisiana University to formulate a plan for the implementation of IBS for the State of Louisiana. Mr. Kurt Morauer, Director of Training and Program Development for NCCER, assisted in defining program and instructor certification procedures, and student credentialing for selected skill areas of the construction industry. Services and materials available from the NCCER were included to assist with the development and presentation of selected program standards. The International Brotherhood of Electrical Workers (IBEW) training materials were also available for analysis and review.

#### The Panel's Findings

The panel recommended that there be additional study focused on what steps Louisiana can and should take to pursue developing a qualified labor pool for this industry. As early as 1988, the U.S. Department of Labor (DOL) predicted shortages when it issued its "Workforce

2000" study. The need for construction careers training was established and supported by 1999 data from the U.S. Department of Labor Bureau of Labor Statistics which stated that 240,000 workers are needed each year to replace individuals who are retiring or leaving the construction industry annually (Garrity, 1999). The Construction Labor Research Council (CLRC) published a report in 2000 projecting that 100,000 new construction craft workers are needed per year nationally, and that this number could be significantly higher. Information gathered from the five public hearings bear this out, as well. The following statements summarize the public hearing findings: 1) Louisiana has 11,190 licensed contractors, 2) over 4.000 construction workers are needed in Louisiana immediately, the labor shortage is not sudden, and will likely continue into the foreseeable future, 3) the current workforce is an aging one, as the average age of construction workers is 47 years old (US Bureau of Labor Statistics), 4) the construction industry faces a marketing challenge since construction careers were ranked 249 of 250 choices made by high school seniors on an "Attractive Careers" list in the Jobs Rated Almanac of 1992 (Korman, 1992), and 5) employers in this field have a pressing need to find prospective employees who demonstrate a solid "work ethic" - reliable, responsible, honest, and motivated to do a good job.

#### The Future

In 2000, the construction industry reported \$6.7 million paid out in wages and salaries as well as 1.6 million people self-employed in this field (Sandherr, 2002). It was, and still is, one of the nation's largest industrial sector employers. The Associated Equipment Distributors Foundation reported (Cotter, 1999) that one thing has been learned about the complexities of workforce shortages: Although this is a national problem, solutions must be found at the local level. As identified at all of our five public hearings, a positive image of the construc-

tion industry must be built and communicated to students, parents, and guidance counselors. Image-building must become an ongoing activity with specific examples of case studies featuring success stories of males and females employed in the construction industry having satisfying and profitable careers. Another approach in tandem with image-building is the establishment of School Partnerships. This can be in the form of Construction Careers Academies, supportive advisory committees, and active internship or cooperative education programs. Through the Construction Careers Connection grant activities, the Department of Industrial Technology at Southeastern Louisiana University was able to secure a \$100,000 Endowed Professorship in Construction Technology. This Professorship was jointly funded through the Louisiana Board of Regents for Higher Education and the Louisiana State Licensing Board of Contractors.

#### References

Cotter, Kathryn. (1999, September). The time is now for workforce planning and participating. Construction Equipment Distribution. Retrieved March 14, 2002 from http://www.aednet.org/ced/sep99/ pathways.htm

Garrity, Kathleen. (1999, March 8). No easy solutions to construction labor shortage. Seattle Daily Journal of Commerce online edition. Retrieved March 14, 2002, from http://www.djc.com/special/ construct99/10050580.htm

Korman, R. (1992). Learning to love the spotlight... Journal of Construction Engineering and Management, 229; 24-28.

National Center for Construction Education and Research. (2002). National Craft Training Registry. Upper Saddle River, NJ: Prentice-Hall

Sandherr, S. (2002). Career guide to industries, construction employment. The Associated General Contractors of America. Alexandria, VA