

## PANEL DISCUSSION

# Internship and Mentoring Programs

---

Shirley McCall, Moderator, *TransTech Academy, Cardozo Senior High School*

Evelyn Thomchick, *Pennsylvania State University*

Stephen Blake, *Center for Transportation Training, Education, and Research, Inc.*

Beatrice Lee, *Los Angeles County Metropolitan Transportation Authority*

Donna Sharp, *Norman Thomas High School/Council of Logistics Management*

---

Shirley McCall

Established in 1991, the TransTech Academy at Cardozo Senior High School was the first transportation studies academy in the Washington, D.C., area. The academy is designed to provide high school students with a well-rounded academic and technological program that exposes them to future career opportunities in the field of transportation. The program helps students bridge the gap between school and the workplace through internships, mentoring, summer work programs, field trips, and college visits. The Transportation Research Board (TRB) is among the organizations that provide TransTech students

with internship opportunities. Participants are encouraged to visit the TransTech Academy exhibit at this conference, where you will have an opportunity to meet some of the students whose projects are on display.

Our panel today will discuss a broad range of internship and mentoring programs offered to students from high school through graduate school. These are but a sample of many exciting programs available to students from middle school through graduate school. Additional programs are highlighted in the displays and exhibits (see Appendix B in these proceedings).

---

## Evelyn Thomchick

The Penn State Business Logistics Internship Program is part of the Penn State Smeal College of Business Internship Program. Undergraduate and graduate students apply for internships through the Internship Office. Undergraduates are generally placed in 5- to 8-month assignments, and M.S. and M.B.A. students are available during the summer between their first and second years of study.

There has been a great increase in demand for business logistics majors in recent years. In the 1996–1997 academic year, 168 business logistics students were placed in internships. These students represented the largest proportion (28 percent) of the internships awarded in the Smeal College of Business Administration for 1996–1997. Marketing and finance follow, each with 18 percent, and accounting with 17 percent. Average salaries for business logistics undergraduates were in the range of \$450 and for M.B.A. students just under \$800. The demand for undergraduate business logistics interns has more than doubled within the last 5 years, with just under 80 being placed in the past academic year. Many students have had two 6-month internships before they graduate.

Some students find internships or business logistics-related jobs in other ways. The Council for Logistics Management (CLM) supplies universities and other institutions with a large list of employers who offer summer internships in logistics. For these internships, students apply directly to the employers. Last year, CLM interns worked as analysts in the areas of materials management, marketing, and operations and provided support to consultants and managers in areas such as finance, pricing, and transportation. Companies participating in programs such as those offered by CLM and other organizations not only find productive summer employees, but also are given an opportunity to work with and screen potential future employees. The same is true for the intern, who has the opportunity to learn more about a company and particular type of job before he or she makes a long-term commitment.

The American Society of Transportation & Logistics (AST&L) also provides mentoring services through its Board of Examiners and chapter offices. The AST&L main office will also recommend mentors if requested. Many companies with employees in the certification program set up mentoring programs within their companies.

---

## Stephen Blake

FHWA, U.S. Department of Transportation (DOT), with support and funding from the Federal Transit Administration, Federal Railroad Administration, and the Research and Special Programs Administration, contracted with the Center for Transportation Training, Education, and Research (CTTER) to coordinate, administer, and conduct the Summer Transportation Intern Program for Diverse Groups (STIPDG) for the summer of 1997. This program provides an opportunity for students from diverse educational and social environments to spend 10 weeks at DOT working as interns with one of the modal administrations and performing research on selected transportation topics.

STIPDG is an excellent vehicle for exposing students to the inner workings of DOT and provides them with mentors who assist them in developing career objectives

and goals. Students are exposed to current topics of interest in the transportation field, have an opportunity to sharpen their research skills using those topics, and are introduced to individuals in the field who may be able to assist them as they pursue careers in transportation.

Fifteen bright and capable students representing various cultural and ethnic groups from both minority universities and other universities and colleges participated in the 10-week program in 1997. The students were chosen through a national competition to which 65 students throughout the country submitted applications. Students were selected on the basis of their grade point average, their interest and work experience in transportation, their expressed areas of interest, autobiographical sketches, and letters of recommendation from professors and employers. They represented 13

colleges and universities in 11 states, Puerto Rico, and the District of Columbia. Six were from historically black colleges and universities (HBCUs), one was from a Hispanic-serving institution (HSI), one was from a Native American college, and the remainder were from other institutions of higher learning. Nine of the students were engineering majors. Just over half (54 percent) were men, and 46 percent were women. About two-thirds (66 percent) were African American, 12 percent were Caucasian, 12 percent Asian American, 6 percent Native American, and 6 percent Hispanic American.

The 10-week program, which ran from June 2 through August 8, began with an orientation session and introduction of students to their mentors. The interns met with modal administrators and with Secretary of Transportation Rodney Slater. During the program, interns visited several transportation organizations to meet staff, collect information for research projects, and make contacts for future job opportunities. The visits included Tidewater Transit and the Virginia Ports Authority in Norfolk, Virginia; the Maryland State Highway Administration and Mass Transit Administration in Baltimore, Maryland; and the Regional Plan Association and Port Authority of New York and New Jersey in New York City. They also visited a number of organizations in the Washington, D.C., area, including TRB, the American Association of State Highway and Transportation Officials (AASHTO), and the American Public Transit Association (APTA).

The program also provided training in job interviewing and networking techniques. The culmination was an awards luncheon at which certificates were presented by mentors and STIPDG committee members. For those interested, additional details on the program are available, as well as copies of the research papers prepared by the interns.

Also present at this conference are two of the students who participated in the 1997 program, Leo Dumond, a senior civil engineering major at Howard University, and Melody Burch, a junior mechanical engineering major at George Washington University. Dumond's interest is in the design of transportation facilities, and he was assigned to FHWA for his internship. His assignment was to prepare a summary paper on the different types of pavement condition survey equipment and to work with the group leader in making final arrangements for the National Workshop on Pavement Management. Burch is interested in the area of automobile safety systems, particularly crash analysis, and was assigned to the Research and Special Programs Administration. Her assignment was to assist a senior engineer in reviewing new editions of American National Standards Institute (ANSI) technical standards that are incorporated by reference into the pipeline safety regulations, in indexing these standards for ease of reference by engineers to match technical requirements of each standard with construction and maintenance requirements for pipeline facilities; in preparing a report on guidelines for small gas pipeline operators, and in setting up and running various technical committee meetings.

---

## Beatrice Lee

The Los Angeles County Metropolitan Transportation Authority (MTA) mentor and internship program has many facets and affords many opportunities to students, public agencies, and businesses. This presentation provides an overview of different aspects of the program; conference participants are encouraged to stop by the exhibit to obtain more information.

The best example of what can be accomplished through the program is offered by the two students from North Hollywood High School who are part of the Transportation Careers Academy Program (TCAP) and are the winners of the student essay contest. In their essays, Ana Martinez and Maalik Russell discuss their

school-to-career experience. Maalik had a summer internship with the MTA in which he worked with staff and inspectors involved in subway construction. Ana worked for the summer with Engineering Management Consultants, an MTA contractor.

The Transportation Teaching Institute (TTI) is a volunteer program managed by the Career Development and Training Center of the MTA. It is composed of industry professionals from the MTA and other businesses who volunteer service to students and teachers. Resources and technical assistance are provided to TCAP, the Transportation Occupations Program (TOP), and local institutions and via the Internet. There are six volunteer groups within TTI: Train the Teachers, Curricu-

lum Writing, Mentors for Students, Mentors for Teachers, Information and Resources, and Lectures and Tours.

Components of the internship program are as follows:

- An implementation plan and guidelines;
- Pre-work-site visits and meetings with prospective employers;
- Monitoring of student progress in the classroom;
- Workshops on writing a resume and other aspects of job preparedness;
- Student job interviews by volunteer professionals;
- Discussions on job application selection and placement criteria;
- Teacher evaluation and assessment;
- Workshops on issues relating to human resources, student processing, work permits, medical coverage, payroll and accounting procedures, and worker's compensation;

- Intern and employer job orientations;
- On-the-job work-site review; and
- Program exit evaluations by the intern and the employer.

The challenges faced in this program include identifying employers who are able to fund student interns, securing work-site supervisors who will offer quality work assignments, and matching students' skills to job requests. The successes of the program are reflected in the permanent placements with businesses following summer internships, the number of students going on to college after their internships, the enhancement of student resumes as a result of the work experience, and the evidence that employer projects have moved forward in part as a result of the intern assignments.

## Donna Sharp

In 1991, the Council of Logistics Management (CLM) New York City Roundtable and the Office of Occupational Education of the New York City Board of Education began discussions about developing a high school level business program that would focus on the study of logistics and international trade. In September 1993, a 3-year high school program, now known as the Logistics Program, was approved and initiated with 34 students enrolled. The program is housed at the Norman Thomas High School for Commercial Education, located on 33rd Street just off Park Avenue in Manhattan.

The program was designed so that graduates would be well qualified for an entry level in logistics, transportation, or international trade or could pursue a college education, or both. It was decided by the steering committee for the Logistics Program to develop an interdisciplinary curriculum that integrates academic and occupational subjects toward goals that are worthwhile and essential to today's logistics professional. The 3-year program begins as students enter their sophomore

year and consists of the following cycles: Year 1, Introduction to Logistics and Global Trade; Year 2, Types and Methods of Transportation; and Year 3, Logistics Management.

An exciting part of the program is the senior-year internships, which grant academic credit for on-the-job training in logistics management to seniors who have completed 2 years of the high school logistics program. Students spend approximately 12 weeks, usually 4 hours a day in the afternoons, with their sponsor company. Participating sponsor companies have included Agip USA, Asarco, Colgate-Palmolive, Level Company, Pfizer, UPM-Kymmene, and United Parcel Service, to name a few.

Throughout the year, transportation and logistics professionals visit the school to participate as speakers and discuss topics such as careers, technology, supply chain management, warehousing, purchasing, and transportation. In addition, throughout the school year, tours are scheduled for all students enrolled in the program.