## EDUCATION, TECHNOLOGY, AND MEDIA: A PEAK INTO MY SUMMER INTERNSHIP AT NASA GLENN RESEARCH CENTER IN CLEVELAND, OHIO

Giovanna E. Mignosa 2004 NASA's Abstract

Mentor: Susan F. Gott

Senior at Ohio University, Athens, Ohio Major: Video Production & French Minor: Art & TEFL Certificate (Teaching English as a Foreign or Second Language)

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"Ad aspra per aspera" derives from Latin and it translates "to the stars through difficult places." When I was little I used to dream of reaching the stars, "of running away to sea, of curing cancer, of playing for the Pirates, of painting in Paris, of tramping through the Himalayas" (Dancing School by Annie Dillard). I always wanted to explore space and to be on a mission out of the Earth. I didn't get to fly into space on the shuttle, but I have had the opportunity to participate in the Lewis Educational and Research Collaborative Internship Program (LERCIP) through the Ohio Aerospace Institute (OAI) and the Educational Programs Office (EPO) at NASA John H. Glenn Research Center (GRC) at Lewis Field in Cleveland, Ohio.

Many were the reasons for me wanting to participate in the LERCIP College Program such as continued development of my professional abilities, and the fact that the employees at NASA GRC treat me like a family member. I have come to NASA not knowing exactly what is that I wanted to do with my life, but through the years NASA has helped me to discover areas of interest to me. I am still in the process of figuring out more about myself, but I believe that I am on my chosen path thanks to my successful college (academic and personal success) and NASA.

For the last three years (2002-2004) I have worked in the Educational Programs Office (EPO) as the assistant of the LERCIP Program Manager, Susan F. Gott. While working in the EPO I have provided webcast support (December 17th, 2003), for a NASA webcast and videoconference entitled "12 Seconds that Changed the World." In 2003 one of my duties involved working with a group of students, organizing, coordinating and preparing a NASA GRC Educational Video for the Annual Student/Mentor Recognition Banquet. I contributed for NASA GRC in helping out at the Cleveland 2003 Air Show, as well as in the NASA GRC 2002, 2003 and 2004 Annual Honor Awards Ceremony.

This summer I have had the honor to represent NASA GRC at the first ever International Children's Games hosted in the USA, downtown Cleveland sponsoring some of the educational programs both for students and teachers, as well as the visitor center and NASA's upcoming events for the year. I provided assistance to my mentor in compiling program reports; I interacted with mentors to follow-up on tracking and student evaluation forms. I coordinated various cultural and educational events such as the Annual Student/Mentor Recognition Banquet, Picnic, tours, conferences, etc., and I assisted the Program Manager in daily routines.

My internship this summer as the assistant of the LERCIP Program Manager involved some of the following:

- organizing/planning activities, such as the Research Symposium I and II (college participants present the research they have been working on to NASA employees),
- 2) attending staff, program meetings,
- 3) drafting communication to staff, interns, and customers,
- 4) participating in videoconferences and webcasts,
- 5) compiling, gathering, and creating charts,
- 6) serving as a liason to the program manager/my mentor with students and mentors.

I loved what I did because I was treated not only as a staff member, but a valued part of the team. I was encouraged to participate in activites, provide input, and listened

## James Moon Senior Tennessee State University Aeronautical and Industrial Technology

My name is James Moon and I am a senor at Tennessee State University where my major is Aeronautical and Industrial Technology with a concentration in industrial electronics. I am currently serving my internship in the Engineering and Technical Services Directorate at the Glenn Research Center (GRC). The Engineering and Technical Service Directorate provides the services and infrastructure for the Glenn Research Center to take research concepts to reality. They provide a full range of integrated services including engineering, advanced prototyping and testing, facility management, and information technology for NASA, industry, and academia.

Engineering and Technical Services contains the core knowledge in Information Technology (IT). This includes data systems and analysis, inter and intranet based systems design and data security. Including the design and development of embedded real-time software applications for flight and supporting ground systems, Engineering and Technical Services provide a wide range of IT services and products specific to the Glenn Research Center research and engineering community.

In the 7000 Directorate I work directly in the 7611 organization. This organization is known as the Aviation Environments Technical Branch. My mentor is Vincent Satterwhite who is also the Branch Chief of the Aviation Environments Technical Branch. In this branch, I serve as the Assistant program manager of the Engineering Technology Program.

The Engineering Technology Program (ETP) is one of three components of the High School L.E.R.C.I.P. This is an Agency-sponsored, eight-week research-based apprenticeship program designed to attract traditionally underrepresented high school students that demonstrate an aptitude for and interest in mathematics, science, engineering, and technology. This program offers hands-on work experience to develop practical and theoretical knowledge, skills, and abilities in Electrical, Electronic, and Mechanical Engineering Technology. Program activities include a design project, fabrication, classroom instruction, oral presentations, and a variety of enrichment activities, such as career counseling and facility tours under the careful supervision of the High School L.E.R.C.I.P. staff.

As the Assistant Program Manager, I am responsible for managing 11 Engineering Technology Students across GRC. Inherent in my responsibilities is to communicate with management, engineering, and the technician workforce to develop student work assignments in the areas of electrical, electronic, and mechanical engineering technology. I also provided resume training, cover letter development, and the interviewing skills techniques.

I am responsible for the ordering of materials and accessories for the ETP which include: Robots, Boe-Bots, Sumo Bots, 130-in-1 labs, and soldering kits and tool kits. I coordinate weekly meetings in which the students of ETP and I analyze resumes and cover letters. We also run practice presentations to prepare each student for their final presentation in August. I am also responsible for ensuring computer access of each student prior to arrival. I participated in the Professional Development workshop. I also performed follow-up sessions with the students of the High School L.E.R.C.I.P.

My assignments have been very beneficial. I am gaining great experience in both management and education. These assignments have turned me into a more responsible and dedicated employee. I am self-starting, self-motivated, and very team oriented. I have developed professional work beliefs which are punctuality, timeliness, efficiency, and a respect for others. I am confident that where ever I shall go I will demonstrate a strong commitment to excellence in producing quality goods, services, and most importantly customer satisfaction.