



Shiva Ayyadurai shows plans for the electronic mail system that he designed to math teacher Irman Greenberg and Stella Oleksiak, coordinator of the Independent Study program at Livingston High School.

## *Livingston Student Designs Electronic Mail System*

On October 7, Irman Greenberg, math teacher, and Stella Oleksiak, Independent Study coordinator, along with Shiva Ayyadurai and his father visited the Computer Center at the College of Medicine and Dentistry of New Jersey to observe the design and implementation of Ayyadurai's electronic mail system.

Ayyadurai, a senior at Livingston High School under the tutelage of Blair Krimmel, head of the math department and the Independent Study program, with the encouragement of Dr. Leslje Michelson, manager of the lab computer, created an electronic mail system with enough sophistication for immediate practical use at the college and commercial potential.

Since the eighth grade, Ayyadurai has proven that he could work mathematically far beyond the traditional classroom. During ninth grade he was bussed from Heritage to the high school where he passed the Algebra I and II tests while studying geometry at the same time.

During the summer of 1978, he was accepted for the computer science program at New York University where he

learned various computer languages such as Fortran, Basic, Cobol and Snobol, and was graduated with honors. As a consequence of his math background and his computer training, he began his work at CMDNJ.

During the same year, he was accepted for the Atlantic Regional Math League and competed in the Essex County League and the Iron Hills Conference. As a veteran member of ARML, he and the team placed seventh out of the 43 teams.

While studying Ptolemy's Theorem, Ayyadurai observed an entirely new geometric relationship in the field of vector geometry. This finding was published in the journal "The Mathematics Teacher," Fall 1980 issue. In April 1980, he won individual first place in the advanced math competition in the Essex County Math League.

He is continuing his Independent Study Program under Krimmel in the area of statistics.