THE NEW JERSEY CENTER IN NEWARK FOR SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (S&T) EDUCATION

Proposal: NJIT proposes to acquire and renovate Newark’s Central High School, which is being replaced by a new facility opening in the fall of 2007, to serve as the location for the State’s flagship center for science, technology, engineering and mathematics (S&T) education, “New Jersey’s S&T Education Center in Newark,” to assist in improving the quality of all levels of pre-college teaching and learning in New Jersey’s school systems. NJIT, as the State’s science and technology research university, is uniquely qualified to serve as the State’s leader in this area. NJIT will acquire Central High School with its own funds, but will require funding to renovate the structure and will work with Treasury, NJDEA, and NJEFA to develop a complete financing plan for this purpose.

Rationale (Benefits to New Jersey)

- New Jersey’s economy is undergoing a dramatic transformation to an economy driven by technology industries and the application of technology to traditional industries. Our young people must have advanced understandings of S&T subjects, complex problem-solving skills, and the capacity to integrate and apply their knowledge and skills in new situations. These are also the keys to economic opportunity for disadvantaged students whose success is critical for New Jersey meeting its future workforce needs.
- In order to attract and retain new high-tech businesses to the State, New Jersey’s educational system must have a world-class reputation for providing a broad spectrum of its citizens with advanced S&T literacy.
- There is a direct correlation between the quality of S&T teaching in public schools and the quality of a state’s high-tech workforce. To prepare New Jersey’s students for the World Class Economy, we must significantly increase the number of highly qualified S&T teachers in the state.

Goals

- Develop, integrate, and evaluate curriculum, practices and tools that support S&T teaching for all students;
- Offer professional development programs for teachers and administrators in the learning and teaching of S&T subjects;
- Partner with urban, local, and state organizations to develop effective policies concerning the learning and teaching of S&T subjects;
- Encourage students within minority groups to attain excellence in the S&T fields.