

Beth Aukstikalnis

Teaching Edison History with Traveling Trunks

Thomas Edison taking a meal break at his West Orange Laboratory in September 1912 with six of his assistants, or "muckers." Photo courtesy Edison NHS.

Thomas Edison is a familiar figure to students around the country. In New Jersey, where Edison spent most of his career, the state history curriculum includes a science/technology component for fourth graders. Because educational programs at Edison National Historic Site (NHS) help teachers fulfill this requirement, their popularity has soared in recent years. More than 8,000 students take advantage of site programs each year, but the site cannot accommodate thousands more. To meet this demand, Edison NHS has developed an outreach traveling trunk for classroom use.

Edison opened his West Orange, New Jersey, laboratory in 1887. The laboratory complex contains his research library, chemistry laboratory, machine shops, and a stock room that Edison once boasted included everything from "the hide of an elephant to the eyeballs of a United States senator." Edison obtained over half his 1,093 U.S. patents in these buildings. The site also includes Glenmont, Edison's 29-room Queen Anne style home. Interpretive programs at the laboratory focus on Edison's invention process, while programs at Glenmont discuss the role of Mina, Edison's second wife, as "home executive, manager of a staff of up to 10 servants and hostess to such luminaries as Henry Ford and Herbert Hoover."

Edison NHS currently offers two on-site educational programs with a technology theme. "Idea to Product: the Edison Way," geared to elementary school students, examines Edison's invention process and includes such activities as model-making and brainstorming. A new program, "Impact and Technology" is designed for high school students. The traveling trunk, "Working for Edison," which a grant from the National Park Foundation made possible, is for fourth and fifth graders.

In developing the trunk, a committee of park staff and educators considered using one of the themes from the site's enabling legislation, but decided that these themes would not transfer well to the classroom because a site visit is necessary to communicate them effectively. As a result, the committee had to develop a new theme. Although the program would feature Edison and his techni-



cal contributions, the committee also wanted to include other themes, such as cultural diversity, women's history, and the impact of the industrial revolution. To cover all these topics, the committee decided to build the trunk around Edison's workers. Students would learn about Edison's life and work through his employees' eyes. At the end of a traveling trunk session, students could describe one of Edison's work habits, name three Edison industries, and identify three types of jobs at the laboratory or Glenmont.

Committee members chose student activities that addressed different skills and fulfilled the learning objectives. The committee drafted a master list of suggestions and voted for the top five choices. Each of the selected activities takes approximately an hour to complete. A teacher may conduct one activity or any combination of the five. The "Discovery Box" encourages students to experience Edison's era by examining historic objects ranging from men's soft collars to darning eggs. "Where do we go?" develops map skills by asking students to outline the path Edison traveled from Glenmont to the laboratory. The "Mental Fitness Quiz" challenges students to take the test Edison employees had to pass to work in the laboratory. The test questions focus on scientific problems and current events of the 1920s. "Invent-a-Something" borrows Edison's invention process from the on-site program and divides students into teams to create new inventions with Tinker Toys. In "Biography," students dress up in replica costumes to impersonate actual Edison workers. Biographical flashcards provide photographs and information about the workers. Discussion questions complete each activity. The trunk comes with a teachers' manual containing lesson plans for the five activities.

The trunk helps students grasp Edison's work ethic. They learn that Edison affectionately nicknamed some of his closest associates the "insomnia squad" because of the long hours they worked. Students also discover that Edison's con-

Edison employee Fred Ott, performing in the kinetoscope film, "The Record of a Sneeze." Made in 1894, it is the oldest surviving copyrighted motion picture. Photo courtesy Edison NHS.



tributions went beyond the incandescent light to include motion pictures, the phonograph, and the fluoroscope, an early X-ray device. Students learn about Anna Case, a singer who recorded for Edison's phonograph company. They see the world through the eyes of Fred Ott, an expert machinist who also starred in "The Record of the Sneeze," one of the earliest movies. The servants who maintained Edison's home also place him in his era. The traveling trunk emphasizes that Edison did

not work alone. From the 1870s through the 1920s, a diverse workforce helped Edison accomplish his goals in his laboratories and factories. They completed projects ranging from kitchen appliances to the storage battery and the motion picture camera, helping Edison shape 20th-century life.

Traveling trunks like "Working for Edison" can reach distant audiences unable to take advantage of on-site programs. Although the program has received positive responses from teachers, the trunk is a work in progress. Evaluation forms ask teachers to rate class activities and relate the students experiences and reactions. This information will help us revise the trunk to meet the needs of students. The "Working for Edison" trunk is available for loan by calling Edison NHS at 973-736-0550, ext. 60.

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