Summer Program Report
Academic Secondary Enrichment
Middle School Enrichment: Planes, Trains, and Automobiles

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Program Overview
The Academic Secondary Enrichment (ASE) classes are designed for middle and high school academic students. These students work hard in school to learn regular core curriculum subjects such as language arts and math in classrooms with their sighted peers. In TSBVI summer programs, they have the opportunity to practice these academic skills within meaningful, high-interest activities. At the same time, they learn and practice skills in the Expanded Core Curriculum for Blind and Visually Impaired Students (ECC). The ECC includes skills that are unique to the needs of students with visual impairments. ECC skills enhance an individual’s ability to access the regular core curriculum, live independently, and enjoy social and recreational activities. Skills in the ECC include compensatory academic skills (e.g., braille and tactile graphics), orientation and mobility, social interaction skills, independent living skills, recreation and leisure skills, career education, assistive technology skills, sensory efficiency skills, and self-determination skills.

Each ASE class has a unique theme, and students participate in a wide variety of activities related to the theme of their class. During these activities, students learn and practice specific ECC skills such as applying math and literacy skills when creating and following a budget, food shopping and preparation, managing and organizing their living area, planning and evaluating a project, using public transportation, keeping up with belongings, and using technology for various purposes including research and communication with family and friends.

An additional benefit of the program is the opportunity to interact with other students with visual impairments. For many, talking with other students about the challenges they face at home and school may both alleviate feelings of isolation and increase self-confidence.

The ASE classes taught during the summer of 2013 were: Camp Challenge, Camp Fine Arts, Catching Some Rays: Space Weather, Community Independence, Adventure/Outdoor Education, Middle School Enrichment, Performance Arts Intensive, Problem Busters, Video Production, Visual Arts and More, and Wildcat Catering and Bistro.
Class Description: Middle School Enrichment: Planes, Trains, and Automobiles

Middle School Enrichment (MSE) students participated in a unit entitled “Planes, Trains, and Automobiles”. In short, students were presented with opportunities to explore, build, and ride on various types of transportation. Students practiced teamwork, use of their visual, tactual, and auditory skills, and improved their mathematical and scientific concepts.

Students had many opportunities to travel on vans, city buses, and the Austin MetroRail. At the Bob Bullock museum, they interacted with a vehicle-of-sorts in the form of a movie with motion-components built in. They toured Camp Mabry, an active Texas National Guard base, and were able to explore and learn about military vehicles, including airplanes, tanks, helicopters, and jeeps.

In the spirit of transportation, students also worked in groups to build examples of different vehicles. They created various paper airplanes in an attempt to construct the airplane that would fly the greatest distance. Results were measured and graphed, which allowed students to practice important mathematical skills and concepts. Students also made small baskets similar to those one would find in hot-air balloons. The goal of this challenge was to protect a raw egg from breaking when dropped from 8 feet or more. One out-of-this-world experiment had students working together to create model rockets using simple tools and materials like film canisters, paper, and tape. With a little water, Alka-Seltzer, and a dash of science magic, their rockets were sent "into orbit" and timed to see whose rocket stayed aloft the longest. Results were again graphed, and discussions revolved around improving and changing rocket designs to get longer airtime.

While students did not spend their days floating the river in a boat, they did construct boats to explore the concept of water vehicles. Students were responsible for creating boats, using a list of supplies and extra materials they selected and purchased themselves on a bus trip to the Dollar Tree. The goal was to create the boat that could hold the most weight, without violating certain criteria about the size of their boats and the amount of materials used. They learned about boat designs and discussed how to improve their boats while reflecting on what plans worked or did not work.

Through these trips and hands-on building experiences, students gained information about how different vehicles work and about a variety of transportation modes. In the research and creation of their own vehicles, students were able to actively engage in the use of reading, writing, math, and science, all while building relationships with one another and practicing the art of compromise and teamwork.

Expanded Core Curriculum

The areas of the Expanded Core Curriculum were ever-present in each activity in which the students engaged. In order to safely explore and travel on various modes of transportation, students had to learn or practice important orientation and mobility skills. Upon arrival, students began implementing O&M skills as they traveled routes on and off campus with support from staff as needed. Off-campus outings were filled with opportunities to practice skills as students navigated street crossings safely and learned appropriate techniques and expectations for using public transportation such as buses and light rail.

Students used visual efficiency skills, tactile skills, and knowledge of information related to core academics to participate in classroom tasks. They practiced reading and writing, in their appropriate literacy medium such as braille or large print, while working on journals and scrapbooks, in accessing guidelines for activities, and while investigating a museum. Collecting data and performing experiments allowed students to practice important math and science concepts. With the data collected, the MSE students were able to gain valuable exposure to the idea of graphic organizers.
such as line graphs, bar graphs, charts, and KWL (Know, Want to Know, Learned) charts, a concept that can be extremely challenging for students with visual impairments.

By working in teams to construct boats, airplanes, and rockets, students practiced social skills with their classmates and the art of compromise and negotiation. Each person was expected to share information or thoughts constructively and in appropriate ways. Students practiced participating in a variety of roles and actively listened to each other and the staff assigned to them. They also practiced appropriate social behaviors while in public, whether to solicit or decline help, to order food at a restaurant, to pay for purchases, to ask questions of tour-guides, and when interacting with museum exhibits.

INDIVIDUAL COMMENTS
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