



Foundation for the Education of Young Women

2009 SUMMER PROGRAMS

**The Museum of Nature and Science
6th Grade Summer Camp
June 8 – 12, 2009**

This year's experience is all about introducing the students to the wide array of topics that their upcoming curriculum will address. However, we've taken fun approach to learning these concepts through numerous hands-on engaging activities the students are sure to enjoy. The week will have five separate themes: Mysteries in the Museum, Not On Earth, Our World - Past and Present, Sights and Sounds Around the World, and That's a Wrap! Each day will begin with a fun mini-challenge to the students to introduce the daily topic and help the girls learn more about each other.

Mysteries of the Museum will introduce the students to some of the most popular programs the Museum of Nature and Science has to offer, including Wildlife CSI and Mysteries of the Human Body where the girls will have a chance to explore their body's limits as they learn about heart rate, nerves, and reflexes. Not On Earth is all about the science of space: we'll explore Earth from space and take a trip through the universe by visiting the museum's current exhibit "Eyes on Earth" and the Planetarium. The dynamic climate and dinosaurs are the foci of Our World: Past and Present. Through hands-on work with fossils and cast-making we'll see what we know about creatures that roamed the planet tens of millions of years in the past; our Air and Weather experience will help explain how climate change played a role in their disappearance and what the current climate change means for us. Sights and Sounds Around the World teaches us how our bodies are different from one another and just how we use our eyes and ears to perceive and express those differences -- the IMAX film "Pulse: Stomp around the World" will be our guide through this section. And finally, That's a Wrap lets the creative side out as students will learn to create a "live" movie about a story they want to tell. They'll also explore the science behind cameras and filmmaking, the physics of superheroes, and tricks of the cinema.

The girls will leave with a broader sense of science being a permanent fixture of every aspect of life.

The Museum of Nature and Science
7th Grade Camp Overview
June 9 – 12, 2009

During the week the students will learn valuable cooperative problem solving skills and logical reasoning pathways as they confront a multitude of challenges that they must solve using a robot that they assemble, program and modify to the needs of each unique situation. The first day of the week will provide an introduction to their kit, the LEGO Mindstorms NXT. Students will be divided into groups of four; these will be their Project Groups for the week. Each Project Group will be assigned a staff mentor who will be dedicated to providing guidance during the numerous mini-challenges assigned to the groups.

Over the course of the week students will spend the majority of their time learning to assemble and program their robots using icon-driven flowchart software specific to the LEGO Mindstorms NXT kits. The robots are autonomous and pre-programmable, meaning students will have to solve the challenges by creating a program for the robot, running the program, determining whether or not it functions correctly, and then making the necessary adjustments to eventually arrive at a solution. Problems are open-ended, meaning that there is no one particular solution and students must work in the Program Groups to determine which is best for them given the rules of the game.

The students will also have the wonderful experience of working directly with students from the University of Texas at Dallas, who are serving as the chief content providers and will be the master instructors for each class. Guest speakers and surprise visits from individuals involved in engineering and science fields will also be a part of this program and will help provide a wonderful inspiration to the students.

Technology
“Programming with Storytelling Alice”
8th Grade Summer Camp
June 8 – 12, 2009

Caitlin Kelleher created the program named Storytelling Alice as part of her thesis work at Carnegie Mellon to encourage middle school girls to become more interested in programming. In her study, Storytelling Alice participants spent 42% more time programming than those who did not use the program. (<http://www.cse.wustl.edu/~ckelleher/>).

Storytelling Alice combines computer programming skills with storytelling skills which girls find appealing. The program uses a drag and drop interface in a 3D world that is easy for users to understand while still encouraging them to use basic computer programming skills at a higher critical thinking level.

I first used Storytelling Alice with my eighth grade advanced class fall semester 2008 and only four girls elected to take this higher level technology applications class.

And the programming monsters were born! The girls loved choosing characters and creating scenarios. I found their stories more detailed and they loved adding their own voiceovers and music to their programs. For their final project grade the students were allowed to choose two applications we studied during the semester to create two final projects. Three girls chose Storytelling Alice as one of their applications.

During this workshop girls will learn how to use Audacity to record their voice and manipulate music loops. They will learn how to write scenarios and storyboards which they'll turn into programs. Finally, they will use a screen capturing software to capture their program into a format that can be manipulated in movie editing software for viewing on any PC.

Freshman Fish Camp
9th Grade Summer Camp
July 13 – 17, 2009

The 9th grade Freshman FISH camp has been added to the summer program roster for our newest high school students. The goals of this camp are to bring these students together for a week of friendship building, leadership training, and fun wellness activities. Students will learn about stress management, peer relationships, and will spend time with some of their freshman teachers as they consider the scope of the freshman curriculum. Teachers will make suggestions about using effective time management with the class syllabus, projects, and research papers in an effort to make the transition to high school a smoother process.

“Fit to Lead”
10th Grade Summer Camp
July 9 – 11, 2009

This camp will be held on the campus of Texas Women’s University in Denton. The three day camp will incorporate leadership and wellness into a college-life experience. They will take a chartered bus to TWU and begin their adventure with a luncheon hosted by distinguished professors and community leaders. The multi-faceted camp will focus on food and nutrition science. The girls will experience collaborative team building activities and learn how to understand their strengths and weaknesses in order to accomplish a task. The girls will score their fitness quotient, listen to and interact with a panel of TWU students as they discuss preparing for college while still in high school. The students will also use the TWU lab kitchen to prepare a healthy meal. Along with the exceptional learning experiences, the girls will be provided with opportunities to socialize and relax with classmates they may only have known as acquaintances previously.

“Girls Talk Back”
11th Grade Summer Camp
July 27 – 31, 2009

This camp will be held on the campus of Southern Methodist University for a week long summer experience. The girls will gain the skills to command attention in any group, any where, any time. They will participate in three classes each day with the emphasis on writing, public speaking, and professional etiquette. Respected SMU professors, as well as teachers from public and private schools and recognized community leaders, will teach each course.

The girls will experience college life first hand as they live in the residence hall during the camp. In addition to the focus on learning, they will enjoy a variety of evening activities enabling them to interact, create friendships, and enjoy a preview of college life all in a safe, controlled environment.

“Each One – Reach One”
9th – 12th Grade Service Leadership Camp
July 20 – 24, 2009

The concept of service learning is intrinsically linked to leadership education at Rangel. This camp will allow students to reflect upon their role and responsibility to serve the community. The girls will visit various agencies and learn first hand about the problems facing the clients served by these organizations. The small group of students will have the opportunity to work directly with young homeless children, prepare meals for the homeless, and visit with residents in a retirement community. The variety of experiences will afford each student the chance to see a different side of life and understand how they can make a difference in society one step at a time.