SUMMER ENRICHMENT INSTITUTE (SEI) - 2019

A free 3-week summer program sponsored by The University of Iowa's Center for Diversity & Enrichment (CDE); designed to enhance the academic experience of Iowa City-area secondary-level students of underrepresented populations.

WEEK 1 - SCIENCE FAIR
Aaaaand...we are off! Summer Enrichment Institute’s science fair is in full bloom. By the end of the first week, each student had a pretty good idea, if not a solid one, of their final project.

This first week afforded students opportunities to explore their ideas—including a demonstration show by the Physics and Astronomy Department and a guest from the College of Engineering—and to zero in on what they want to study in depth for the next two weeks. A few of the students who participated in the program last year chose a continuation of their project, and it has been enjoyable to guide these students in their process. Most students are exploring their science fair ideas for the first time, which is equally fun.

Jorge and I used the first few days to let the students get to know one another through a few ice breakers and “get to know you” activities. They responded well and seem to care about knowing the names of their cohort. We also talked about some science in the news...hello, Black Holes and graduate student turned professor, Dr. Katie Bouman, who imaged the first one. But our teaching mostly addressed the scientific method and science fair expectations. We understand the stakes here; we want our students to showcase their scientific findings as well as their intellect. Enter the Public Speaking portion of SEI into Science Fair. Communication of their work is key.

Jorge and I discussed in detail the steps to scientific investigation as well as what typical science fair judges look for in a competition. Each team should have a copy of the Eastern Iowa Science and Engineering Fair’s guidelines for judging rubric. By now each student should also have a scientific journal, notes from each day, a pretty definitive research question, and list of materials. Some of the kids may even have begun their investigations and have notes from their first day in the lab. Come Monday, everyone should be actively collecting data.
On Monday, June 17th, Space Physicist, Dr. Allison Jaynes, will talk with students about Space Weather and her work with scientists from South Africa to South America.

~Alexis Durow & Jorge Hernandez

Click on the links below for more info:

Physics and Astronomy Demonstrations (Outreach)

College of Engineering/Environmental Science:
- Environmental Engineering
- Water & Environment

Black Holes

Eastern Iowa Science and Engineering Fair (EISEF):
- EISEF Judges Rubric

BREAK-TIME FUN
Upperclassmen:
This week we spent some times going over the different components that make a speech great and analyzed a variety of speeches for patterns and effectiveness. We also read poems from Arsonist, Joaquin Zihuatanego and the first few chapters of Becoming, by Michelle Obama for inspiration and to analyze organization and tone. The students had fun developing quick writes for impromptu speeches for different audiences from different perspectives. At the end of the week the students narrowed their ideas down to one and started their research to support their perspective. Next week, we hope to start working on the art of the delivery! I am super excited to see everyone work their skills!

~Dolores Silva

Underclassmen:
Wow! This week has gone by so fast! It has been such a pleasure getting to know and become familiar with each of the students. They are all so optimistic and full of life, which make coming to class so much fun! I am so impressed with their curiosity about life and their desire to create a better world.
At the start of the week, we did some ice breaking activities, in order to get to know each other and getting comfortable being around each other. On the first day, as each student walked into the classroom, they were promptly greeted and instructed to place one of their shoes at the front of the classroom, with little, to no other explanation. As you can imagine, this instruction caused some confusion and uneasiness for some students. Once all the students arrived, they were instructed to pick a shoe that was not their own and find the person with the matching shoe. Once they found the person, they were instructed to introduce themselves and tell each other two lies and one truth, with the objective of trying to guess each other’s truth. This ice-breaker allowed the students to demonstrate their creativity as well as their deductive abilities.

We spent some time getting to know each other’s names and something unique about each other. Each student shared some interesting facts about themselves that were simultaneously informative and humorous. We also engaged in a team building activity, called the “marshmallow challenge.” The objective was to build the tallest structure upon which to place a marshmallow, within a 15-minute time-frame. Each team had to build a structure out of 20 spaghetti noodle sticks, one yard of string and tape. This activity allowed the students to demonstrate leadership and team building skills. The winning team was, Tracy, Mishka, Kevyn, and Joshua (photo below). The second-place team was, Amin, Karla, and Teo (photo below). And finally, the third-place team was Kariana, Renzo, Charlie, and Damien (photo below).

Throughout the rest of the week, we spent time reading and discussing Becoming, by Michelle Obama. And spent time reciting and discussing poems from Arsonist, by Joaquin Zihuatanejo. The students have been really engaged with each of these texts and seem to really enjoy exploring the meaning and intent of these authors. They have been truly impressed that Michelle came from humble circumstances much like their own. They have really been able to relate to some of the struggles of Joaquin, such as single parent home and his frustration with social and environmental concerns. They have been a little uneasy about the curse words (when they appear) in the poems, but generally have been able to work through and around them.

We have spent a lot of time reviewing and discussing public speaking techniques and approaches. We spent a lot of time brainstorming potential topics and personal stories and experiences that relate to these topics. At first students, expressed some concerns about having to think too much and too hard about their personal experiences and potential topics of interest. But as the week went by they became more comfortable with me and their classmates, and they gradually opened up about topics and personal experiences that are of deep importance to them.

We collectively created a timeline for accomplishing their final projects. And we ended the week by recording their topics of interest and their personal stories/experiences, along with conducting some research on their topics. I look forward to next week…

~Troy Mills
1ST PLACE
Marshmallow Challenge

2ND PLACE
Marshmallow Challenge

3RD PLACE
Marshmallow Challenge

TED TALKS OF INTEREST

https://www.youtube.com/watch?v=sgrbrBJ9z3w

CLASS DATES & HOURS:

June 10th thru June 26th

- Science Fair classes:
  1. 9am-11am;
  2. Van Allen Hall (building);
  3. Instructors: Jorge Hernandez & Alexis Durow

Mon-Fri: 9-11am Science Fair project; students will apply the scientific inquiry method to a research question of their choosing and carry out the necessary research and data collection to complete a science fair presentation that will be judged by professional scientists and researchers on June 27th.

- Publick Speaking class: Troy Mills
  1. 12pm-2pm; underclassmen
  2. Phillips Hall (building)
Public Speaking class: **Dolores Silva**
1. 12pm-2pm; upperclassmen
2. Lindquist Center (building)

**Mon-Fri: 12-2pm Public Speaking project;** students will read and discuss, excerpts from *Becoming* by Michelle Obama, as well as excerpts from *Arsonist* by Joaquin Zihuatanejo, to delve into their own personal narrative, an aspect of which they will present at the SEI closing ceremony, on June 28th.

**THE POWER OF PUBLIC SPEAKING**

https://www.youtube.com/watch?v=plU-QpcEswo

**SEI STAFF & STUDENT COMMENTS:**

- a positive from this week; &
- are you still worried about the same thing(s) as last week?

"[I enjoyed] being able to get along with the other students. Yes, [I'm still worried], except we've gotten started on the project and we've gone over a timeline for them." ~TN

"One positive thing that happened this week is the comfort level and friendship that the students are developing with each other. This is allowing the students to open up about personal issues that are important to them, which is allowing them explore topics that will make their projects fascinating." ~TM

"This is a new experience and I am happy that I [am] trying to do something; I am still worried about my public speaking project." ~DF

"I got along with my classmates. Our science project we're still thinking about it." ~KH
"I had fun in the science class; I am worried about the whole Public Speaking project and the two presentations." ~MM

"One positive thing this week is that we started our science project; yes, [I'm still worried]." ~KB

"One positive thing that happened this week is that me and my partner figured out what we are going to do for our science project - A worry I still have is presenting." ~KF

"Positive is that I figured out what to do for the science fair project. I'm not worried anymore about finding topics for my public speaking and science fair projects." ~AK

https://www.youtube.com/watch?v=_Il70mlj38o
SEI SCIENCE FAIR

WHEN
THURSDAY, JUNE 27TH, 12-1:30PM

WHERE
UNIVERSITY OF IOWA

MORE INFORMATION
On June 27th, in the Van Allen classrooms for SEI, students are expected to report to their instructors at 9am. From 9am to 11am students will prepare and practice for their science fair presentations which will start at 12pm; from 11am to 11:45 students will be able to take a break and have their snacks, as they would on other program days. By 11:45am, students will be expected to be in their designated science fair presentation room.

SEI CLOSING CEREMONY

WHEN
FRIDAY, JUNE 28TH, 9AM-12:30PM

WHERE
THE UNIVERSITY OF IOWA

MORE INFORMATION
Closing Ceremony will include celebratory activities, student presentations of their Public Speaking projects, Presentation of SEI certificates, and lunch. It will be followed by the end-of-the-program trip to Omaha, NE.

END OF PROGRAM (OVERNIGHT) TRIP

Destination: Omaha, NE
Dates: June 28th (Fri. mid-day) thru July 1st (Mon. afternoon)
BLANCA RAMIREZ
University of Iowa, CDE
Academic Coach

KATIE NEWCOMB
University of Iowa, CDE
Academic Coach

NADINE PETTY
University of Iowa, CDE
Director