



Innovate with Renewable Energy

PRESENTER: Chelsea Ridge

INTRO:

- Energizing our World Camp (EoW) exists to
- Remove barriers that exist for underrepresented groups in the STEM fields
- Expand student knowledge of renewable energy and human impact topics
- Develop needed 21st century skills to solve this generation's complex problems

METHODS

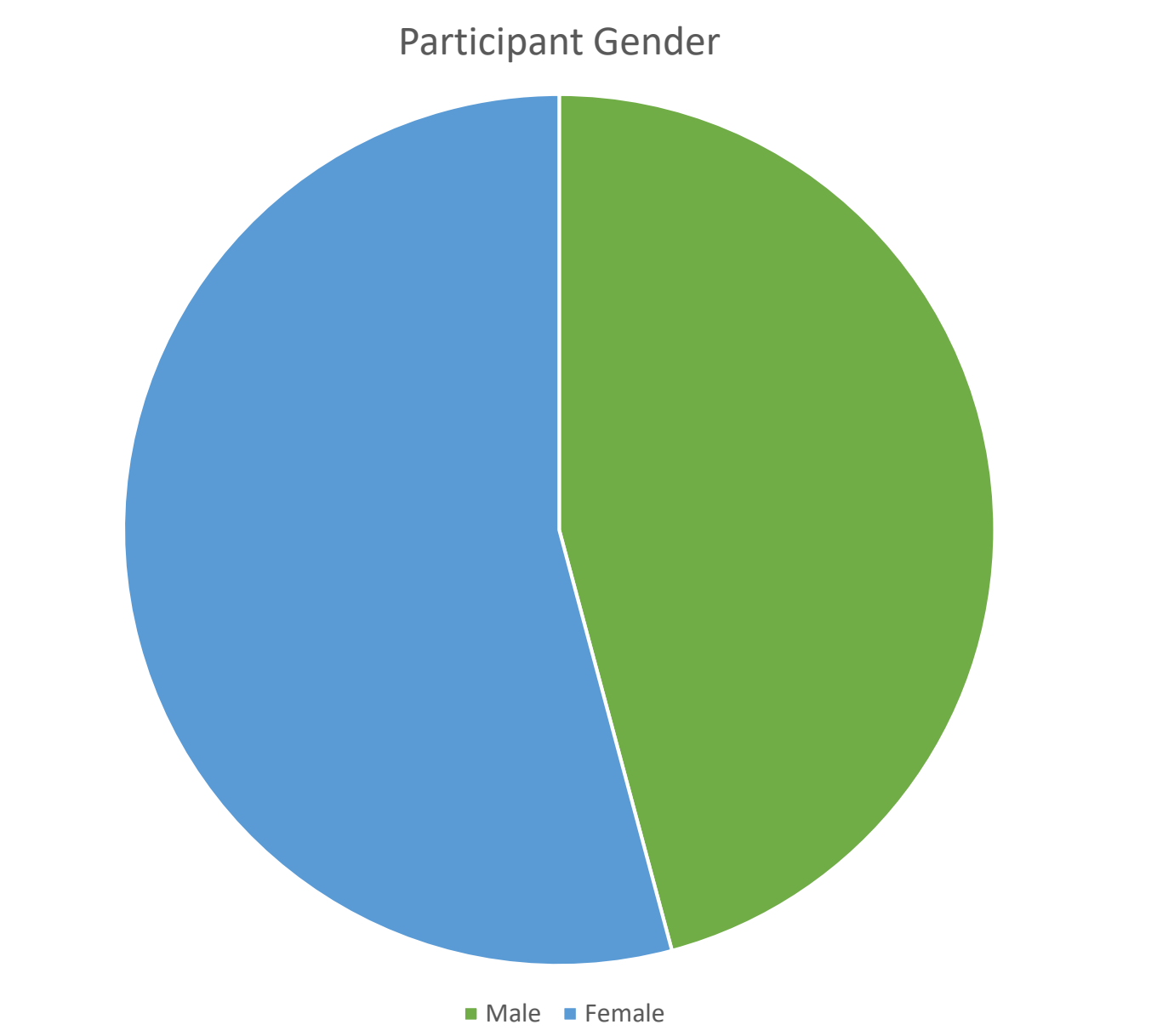
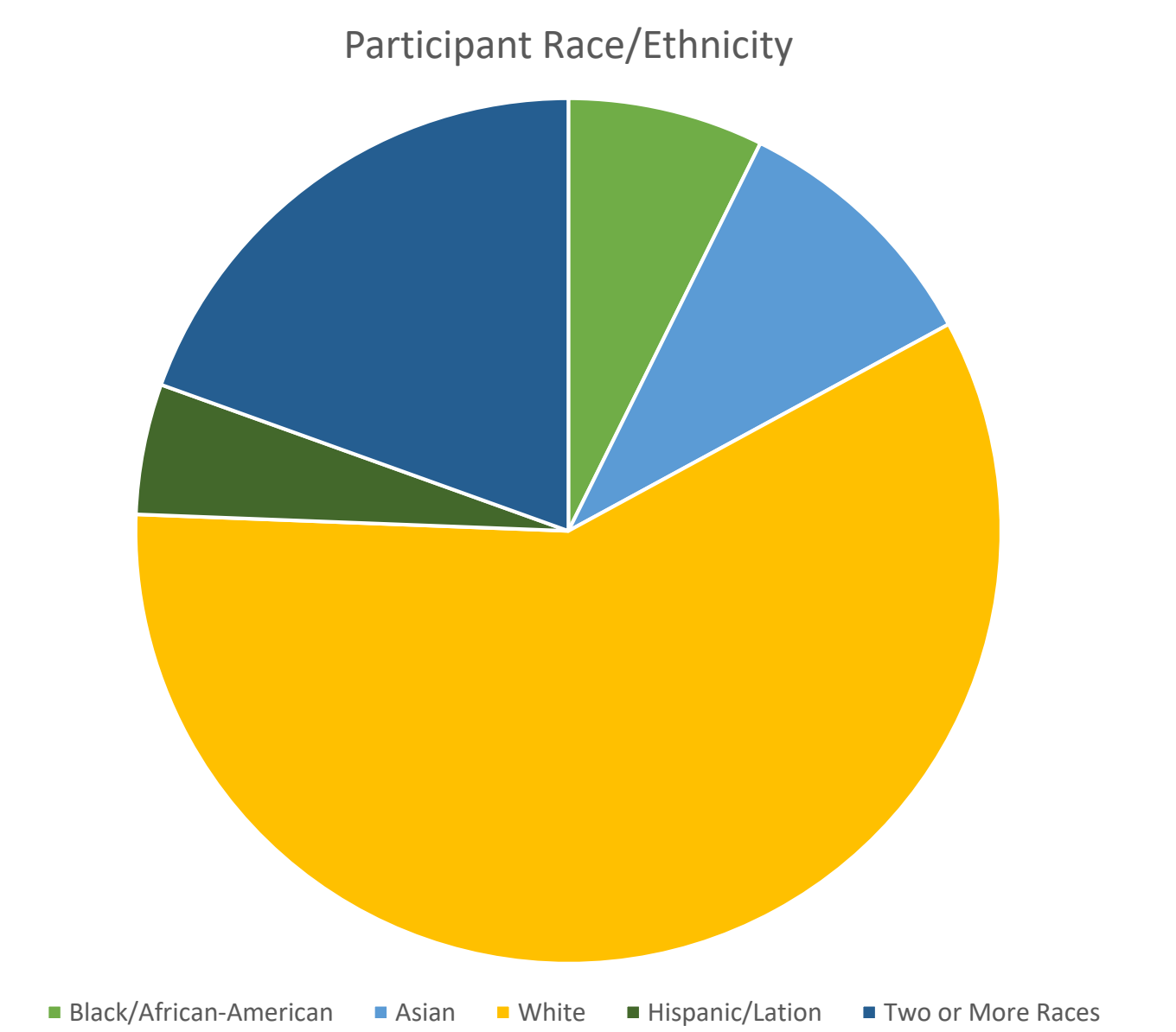
1. Data was collected from 48 middle school students that attended EoW camp
2. Students completed a 16 question content test as well as a validated S-STEM survey regarding students attitudes toward STEM.
3. Statistical analysis was completed on the data set
4. Observational data collected throughout EoW

RESULTS

- On a test of content knowledge for sustainable and renewable energy practices, a statistically significant increase in knowledge was recorded ($p < 0.001$) for the students opting into the testing.
- Student attitudes toward STEM improved specifically in the area of Chemistry, Energy, time management skills, and student value in science for their future.



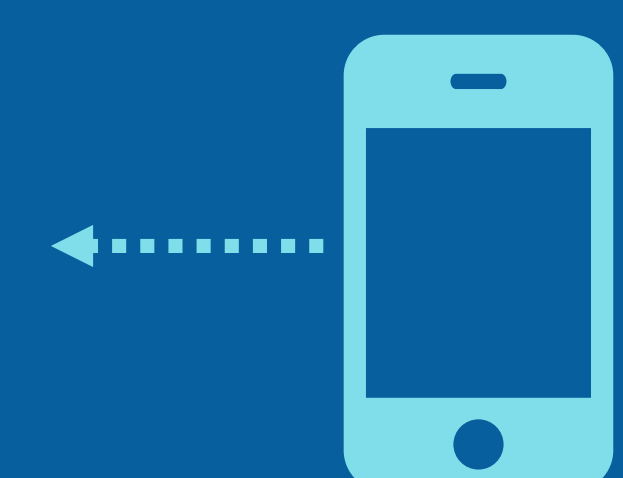
Energizing our World Camp improves student learning and attitudes in STEM.



2019 Energizing Our World Camp Schedule				
	Monday, June 17	Tuesday, June 18	Wednesday, June 19	Thursday, June 20
Morning	(8:30-9:15am) Welcome/Pre-Test Location: SDS	(8:30-8:40am) Start-up PAD 107/109	(8:30-8:40am) Start-up PAD 107/109	(8:30-8:40am) Start-up PAD 107/109
	(9:20-11:20am) Design Thinking Sprint MAX D-1-121	(8:50-9:55am) Hydropower PAD 143	(8:50-9:55am) Wind Power PAD 205	(8:40-10:00) Innovation Lab PAD 107
	(9:20-11:20am) Design Thinking Sprint MAX D-1-121	(9:55-10:05am) Break	(8:40-11:00 am) Field Trip to Hobbies Energy Park	(8:45-10:00) Innovation Lab PAD 107
	(11:30am-12:00pm) Lunch Fresh Food Company	(10:05-11:15am) Wind Power PAD 205	(10:05-11:15am) Hydropower PAD 143	(10:05-11:15am) Innovation Lab PAD 107/109
Afternoon	(12:15-1:15pm) Energy Station PAD 205	(11:20am-12:00pm) Lunch Fresh Food Company	(11:00-11:45 am) Lunch Fresh Food Company	(11:45-12:45) Lunch Lunch Atrium
	(12:25-1:15pm) Sustainability Agriculture Project PAD 377	(12:05-1:10pm) Solar Power PAD 205	(12:00-3:15pm) Innovation Lab PAD 107*	(1:00-3:30) Career & Project Presentation Lunch Atrium
	(1:30-1:45pm) Break	(1:00-2:00pm) Batteries PAD 377	(1:30-3:15pm) Innovation Lab PAD 107*	(2:30-2:45pm) Break Lunch Atrium
	(2:45-3:15pm) Innovation Lab Location: SDS	(2:00-3:30pm) Solar Power PAD 205	(3:15-3:30pm) Wrap-up/Dismiss PAD 107/109	(3:45-3:50) Career Fair and Table Displays

*break as needed

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