



Introduction to Experimental Design

The Stars Challenge at Monmouth University 2009



**Crowding into room five forty seven
Bethany, Derek and "my brother, Kevin"**

**Robbie and Johnnie,
Madison, Jack -
Slater & Jonathan hanging way back**

**Fiona and Emma,
there's Mary Kate too,
Monica, Tyler and Kaitlin with who?**

**Sam, Julianna and Miss Isabel
Lastly Amrita, who helped out so well**

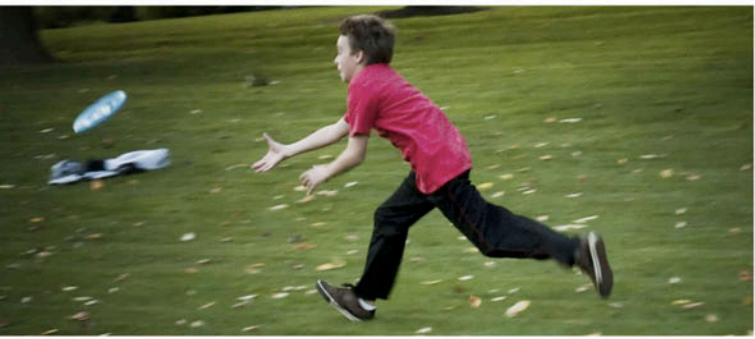
**Always a smile and ready to coach
Assisting in teaching with me (Mr. Roche)**

**We both want to thank you for all that you shared
Your enthusiasm - the fact that you cared -
Optional "homework" that most of you did -
Frankly, for just being "our type of kid"**

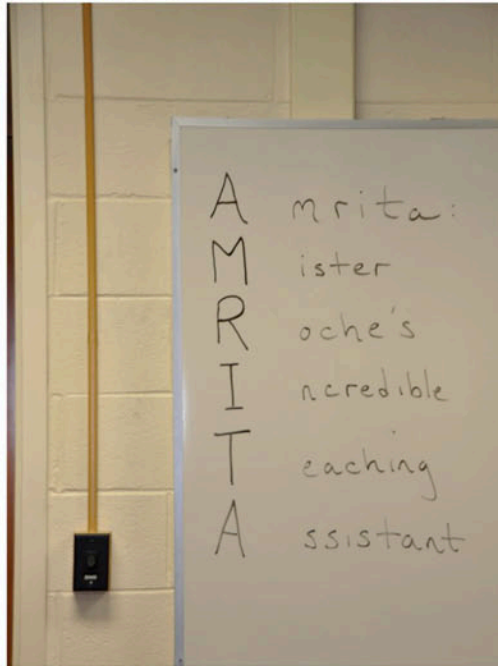
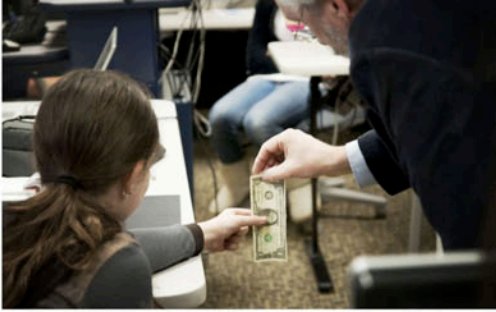
Hoping our paths cross again - try not to lose your sense of wonder.

Most sincerely,

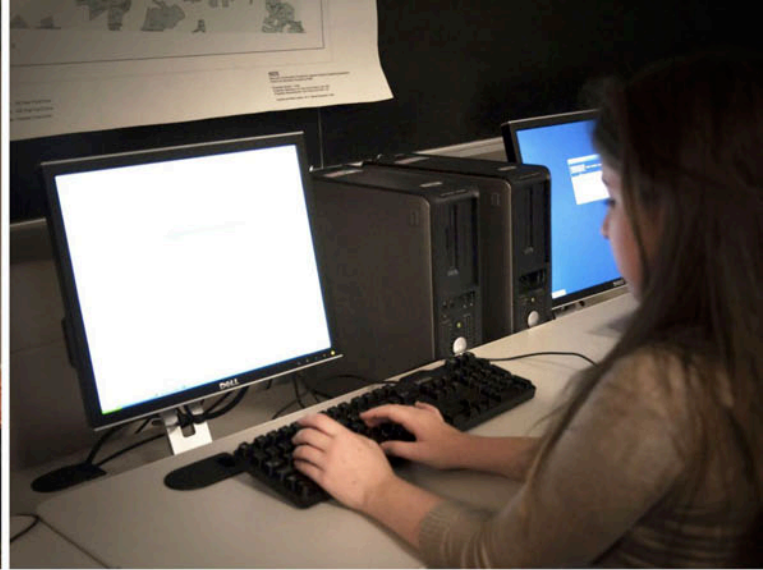
Mr. Roche



First day on campus - off to a flying start...

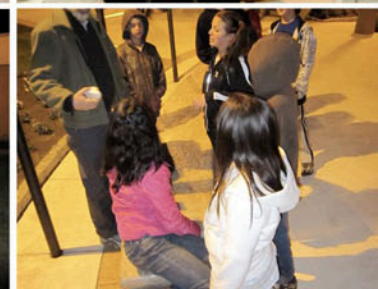
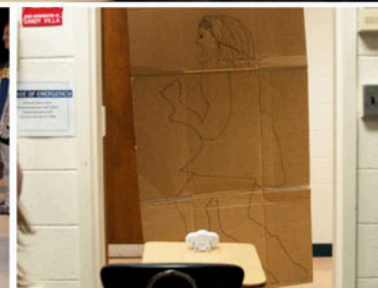


No one ever figured it out - "I guess she really is psychic" was the best hypothesis we heard.

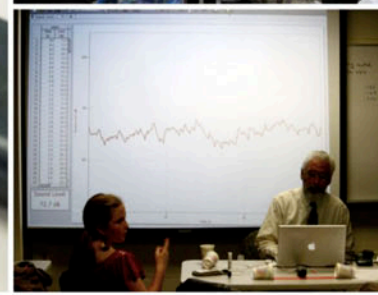
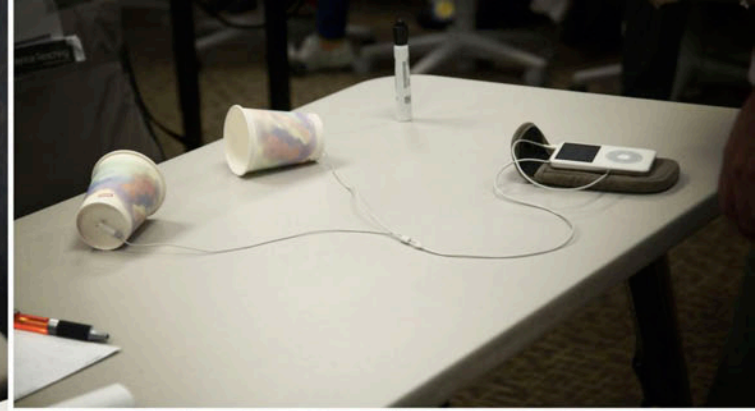




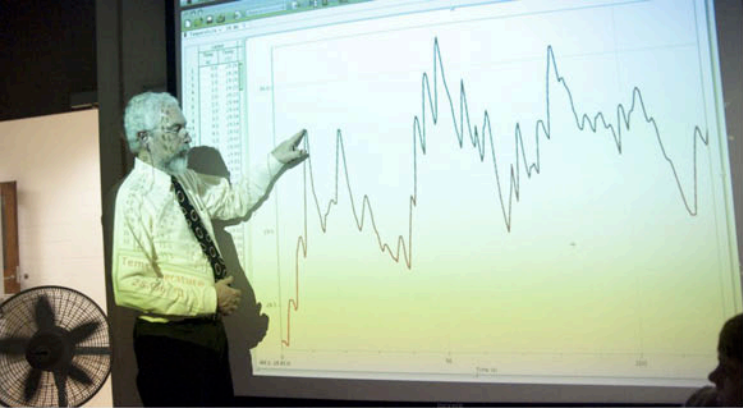
Trying to make sense of the sensors.



Amrita outwits the sensor.



Isabel approves of Mr. Roche's iTunes playlist.

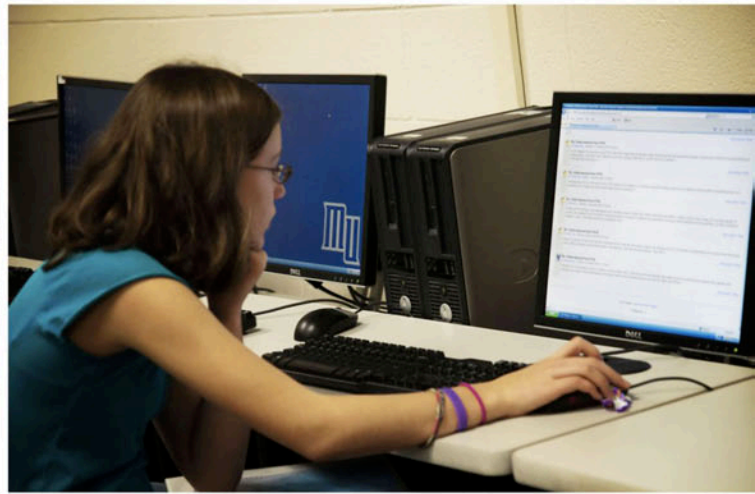


No problem with our sensors on Bethany's hands - keeping it out of Tyler's nose was a different concern!

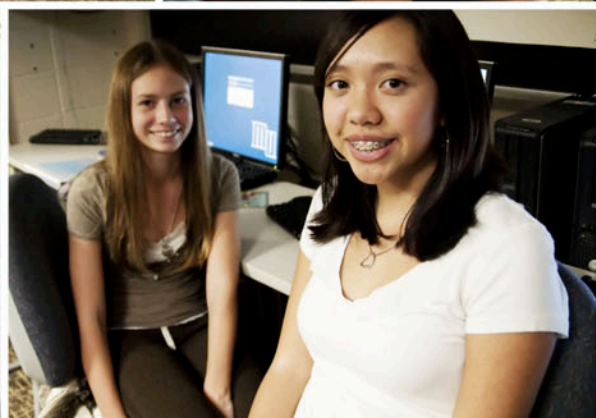
Green Light Table

Name	Project	Task	Approval	Status
Derek		satirize?		
Tyler		Watts Up / Sound level	make a video game! (w/ry building / allegory)	high
Monica				high
Emme				high
Madison				high
Kevin				high
Juliana		hand grip heart rate	make rice / food recipe	high
Sam	insects	O2 sensor	analyze them somehow	high
Robbie		EXG	swimsuit	high
Jack			make a video game	high
Mary Kate	carnival games	force plate	music in movies	high
Isabel		Watts Up Pro	mechanics of carnival games	high
Kaitlin	sunny vs cloudy days	UV sensor	animals/obj. events/behavior	high
Bethany	ice melting devices	UV sensor	mechanics of carnival games	high
Slater		gas sensors (O2 CO2)	hair memory / wing flt	high
Jonathan		photogate	flight simulator	high
Johnnie		gas sensors (O2 CO2)	elec. motor controller	high
Fiona	singing analysis?	microphone	analyze animal light sensor?	high

do it!
we like this idea - just refine it!
and come up with something more feasible!



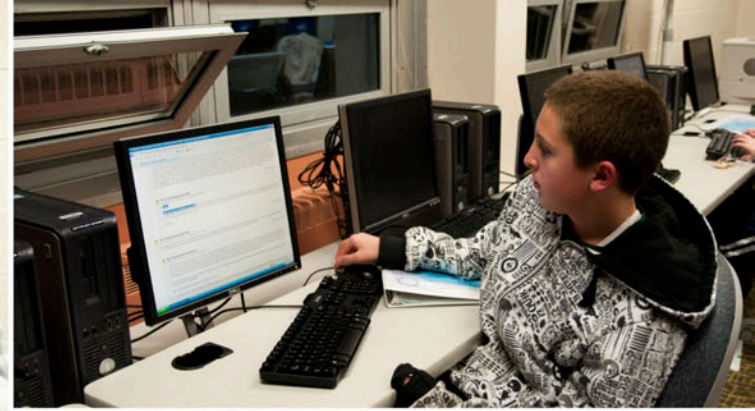
Mary Kate ponders how to best get "green light" status for her proposal.



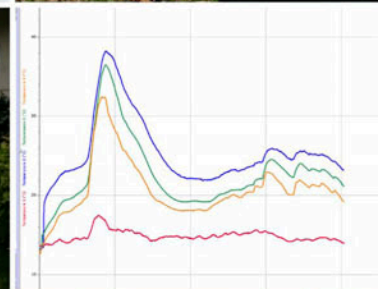
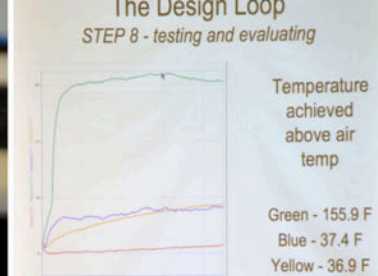
Kaitlin and Monica realize they've developed top-notch green light proposals.

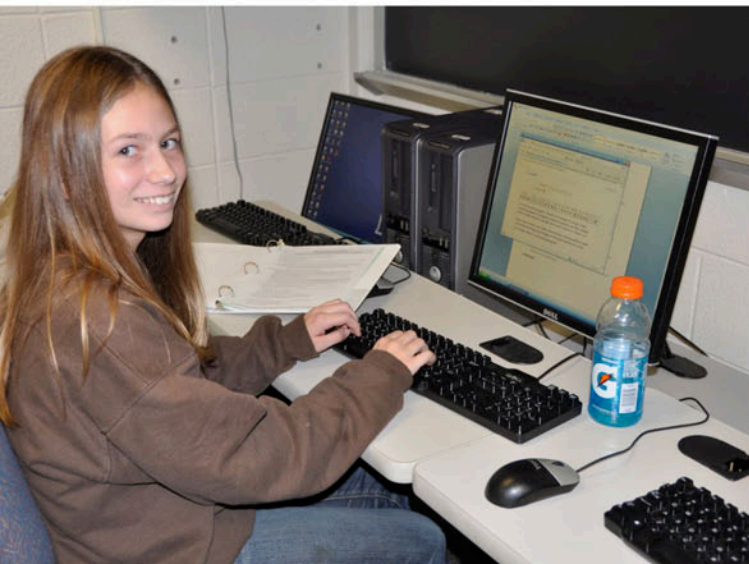
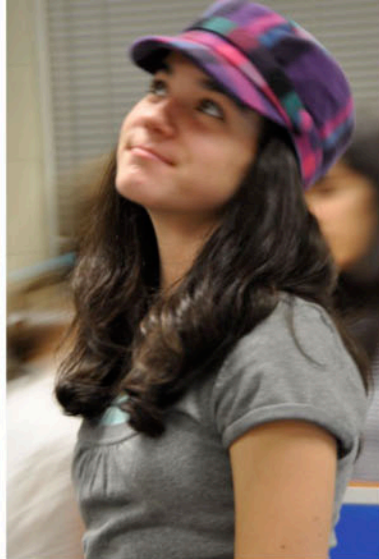


Stars alumnus, Sarah, returns to help out with the heliothermal challenge.



Fiona had the best story about how she was able to gather materials for the collector!



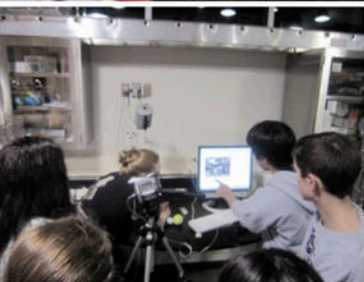


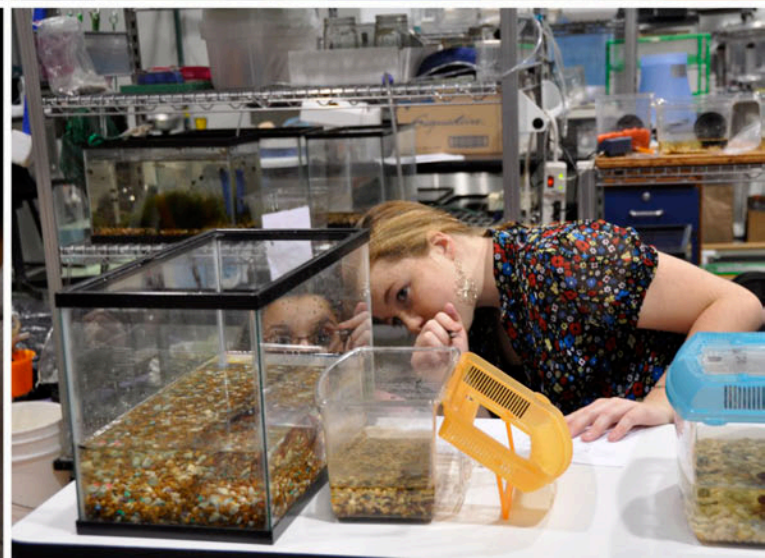
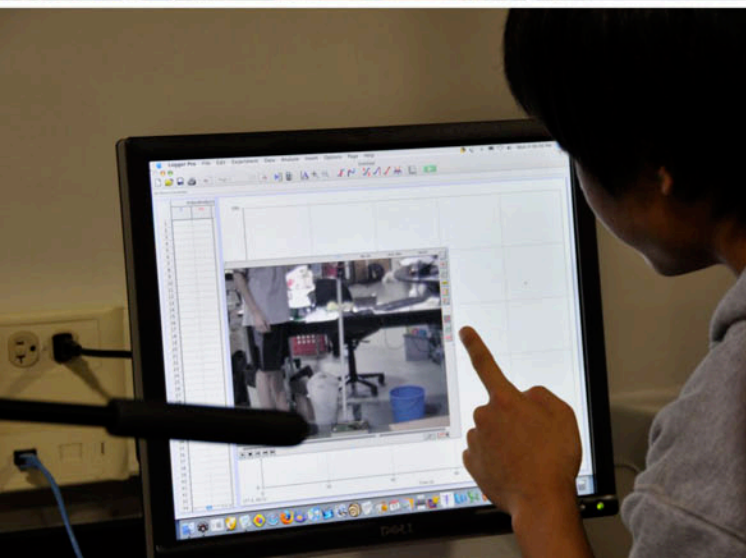


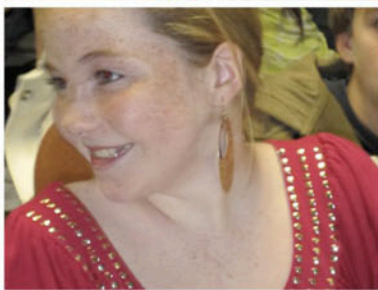
...the girls take a swing at the laser photogates, while the guys code crayfish aggression...



HTHS online mentors "go live" in sharing some of the technology related to their research at High Tech (and Mary Kate looks good in a lab coat!)









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