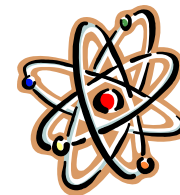


The Daedalus: BACK TO SCHOOL!



Daedalus Meets the NRC

By: Vaughn Shirey & Marisa Somich

The Nuclear Regulatory Commission held a public town hall event at the Sunnybrook ballroom on September 21st, this past month. The Daedalus was happy to attend and even meet up with Lisa Regner, the Environmental Project Manager for license renewal.

Lisa coordinates upwards of 30 scientists, either working for the NRC or private companies to evaluate the environmental impacts of both keeping and removing the Limerick Nuclear Power Plant. Her job is a tough one—from coordinating multiple people to explaining to the public what exactly is going on.

The public is, however, where things can get a bit interesting. During the meeting several opponents to the relicensing of Limerick shared their opinions with the audience.

“I think we should just abandon technology altogether.” said one woman, who claimed that tech-

nology is what is “wrong” with the world and more specifically the younger generation.

Dr. Lewis Cuthbert, president of the local environmental activist group, ACE, had a few words to share.

“There will be no evacuation!” says Cuthbert. Other ACE members blamed Limerick, citing that “increased cancer rates” specifically in the Pottstown area are proof that Limerick is a major pollutant.

Several grass roots energy groups also had opinions to share. Many of them supported nuclear energy as a clean alternative to coal and natural gas plants. They said that building a wind or solar field would be impractical.

Independent engineers were also there to make comments. One man said that he is for relicensing but he had maj-

or concerns about “stability.” He noted that while he was working on the construction of the plant that lower grade concretes were used in the fuel containment pools.

There was even a caller from Florida who voiced his opinion on the matter. “What this is, is a foot-race between the NRC and Congress” the caller stated, “The NRC wants to relicense Limerick before stricter regulations are passed.”

The Daedalus staff also took this time to learn about how and where our energy comes from. It was surprising to learn that the base level of energy comes from Limerick and that other power plants in the area supply energy at peak times (hot summer days, etc.)

The NRC will hold a public meeting for environmental concerns somewhere around next October.

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Special Thanks to:

- ♦ Mr. Joseph Perrone
- ♦ Mrs. Lisa Regner (NRC)
- ♦ Mrs. Jolie Martinez
- ♦ Mrs. Maureen Rieger
- ♦ Mrs. Sarah Miller
- ♦ Mr. Paul Castanzo
- ♦ Pottstown Regional Public Library
- ♦ School Administrators

A clip from the meeting can be viewed by following this URL (Pottstown Mercury): <http://tinyurl.com/6a3h4n8>



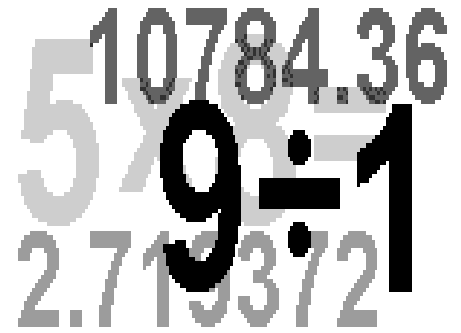
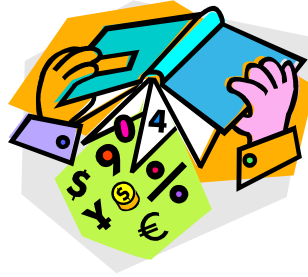
Teachers are Excited for New Year

By: Marisa Somich

Students aren't the only people returning to school, ready to conquer a new year of challenges and surprises. Here's what a few teachers had to say about the new year -

Jolie Martinez (Mathematics) - "As always, I am constantly looking for ways to improve my instruction. I strive to increase understanding of the content with all students, as well as build strong relationships with the class and each individual."

Sara Miller (Science) - "I am hoping to give all freshmen a basic introduction to chemistry and physics. I am hoping that they will get a feeling for doing laboratory experiments, as well as understand that science is very hands on and math oriented."



Summer Reading: Stiff: The Curious Lives of Human Cadavers

By: Vaughn Shirey

A book about dead people. Not the average read for your run of the mill high school student, but for me it was a must have. *Stiff: The Curious Lives of Human Cadavers* by Mary Roach takes a very morbid subject and adds a great amount of humor and a touch of what might be *too many* details. None the less *Stiff* is a masterpiece of a non-fiction title. From the labs of plastic surgeons to a field where corpses are left to decompose, *Stiff*

promises to delight readers of all ages.

Don't get me wrong...this book certainly does NOT read like a textbook. In fact, I found myself turning page after page in search of the next squeamish thrill I could get. My favorite chapter focused on a brain-dead individual whose body was slowly harvested for organs.

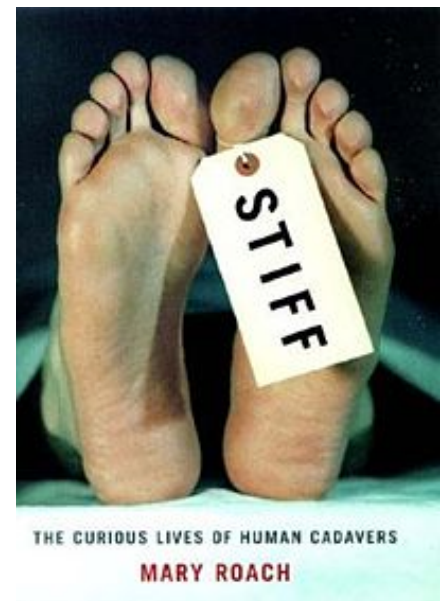
I wasn't the only individual who picked this book up over the summer, several teachers read it as well. Here are their thoughts on the dead -

Paul Castanzo (Science) - "The book *Stiff: The Curious Lives of Human Cadavers* discusses some of the scientific contributions of human cadavers.

If it is possible to use humor tastefully in talking about dead human bodies, the author pulls it off. It was a fascinating read and was hard for me to put down."

Maureen Rieger (History) - "One of the freakiest chapters was the one on the use of bodies in testing ballistics and what happens in explosions. I can't imagine being the person that shoots grandpa's and/or blows them up to see what happens...I can't decide which chapter freaked me out the most. "

"The way I see it, being dead is not terribly far off from being on a cruise ship. Most of your time is spent lying on your back. The brain has shut down. The flesh begins to soften. Nothing much new happens, and nothing is expected of you. "
- Mary Roach



SPECIAL REPORT: NRC AND LIMERICK RELICENSING

PRO

VAUGHN SHIREY:

Critics of nuclear power will always resort to emotion appeal rather than scientific fact. “Our children have the highest cancer rates in the state,” is often a common fallacy proposed by detractors to the technology. Blaming nuclear power for cancer rates is absolutely absurd, there are many other factors that contribute to cancer. These could include anything from diet to stress level.

Nuclear power is absolutely safe—the possibility of error or attack is minimal. Since the Limerick Station is located mostly underground, the possibility of a terrorist attack is miniscule. The site is also guarded by multiple security agencies including local and state police as well as federal agents. In addition the plant has its own federal personnel that constantly maintain and take measurement of chemical release in the plant itself.

So now that the fear is debunked, why do people still reject nuclear power as an energy solution? The answer is simple—media portrayal of nuclear power is almost always negative. Accidents such as Chernobyl and the Fukushima plant are extremely rare and in both cases they were caused because humans failed to realize the risk of performing certain actions. Limerick Generating Station is located in a completely safe area that has virtually no risk of seismic activity.

Nuclear power is the future of American energy, it constitutes the scientific and engineering endeavors of our great nation and provides clean energy for millions of homes.

CON

MARISA SOMICH:

There should be another option besides nuclear power. All of the time a money invested in it takes up resources that could be used for different means, such as trying to save the Earth from global warming. The use of nuclear power is also a threat to everyone living in the area. If an accident were to occur, such as the one in Japan or Three Mile Island, then lives would be at risk. Also, human error is what causes Three Mile Island to be such a disaster.

Nuclear power is something that this country can do without, whether or not some people even realize that is up in the air. Through the past years, the only things that the power plant has done is take up space that could be used to for wildlife or at least some greenery to at least try and keep some air available to people, and they have caused terrible disasters that left people fearing for their lives, not to mention how much money it costs to keep up the maintenance of a nuclear power plant. To some extent, that radiation may even be harmful and could result in some lifelong medical condition.

Of course, other things could help replace the usage of nuclear power. Things such as solar panels would be beneficial when the sun is out and during the summer when the sun shines the brightest and the longest. Also, various wind generators would also be helpful for when there is a storm because of their intense winds. Some electric powers may also be substituted for nuclear energy and power.

Elements of Good Study Habits for Science and Math

Marisa Somich’s Notes for Success in Science:

- 1) Make sure you know the terms that are being discussed.
- 2) Take notes that are clear—put it in your own words.
- 3) Ask questions about anything you don’t understand.

- 4) Reread chapters in your science book.

Vaughn Shirey’s Notes for Success in Mathematics:

- 1) Always try to work out a problem before looking in the back of the book.
- 2) Go after or before school and talk to your teacher if you don’t

understand something.

- 3) Always write out the original equation or information before starting a problem.
- 4) Check your answers but don’t erase unless you are absolutely sure.
- 5) Keep calm—taking your time can mean the difference between a letter-grade.

Pottstown Regional Public Library Hosts Science in the Summer

By: Vaughn Shirey



With the ever increasing need for more young people to enter STEM careers, science and mathematics education must hold the attention of young people and inspire them to learn more about the world around them.

Through an annual program at the Pottstown Regional Public Library, or PRPL, children get first hand experience through exciting experiments and activities. I was fortunate enough to be able to volunteer for the event.

This year's Science in the Summer theme was "Electricity & Magnetism." The program ran



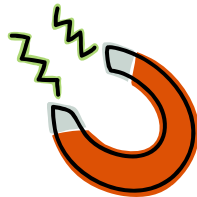
for three days. Three days full of experiments and activities that both taught children safe lab practicum and introduced them to the way electricity works.

DAY ONE ~

Students were introduced to simple circuits using a small battery and a light bulb. They also learned about magnets and what type of materials are attracted to them.

DAY TWO ~

The students built more circuits with switches and other mechanisms such as motors. They also had soda can races using magnets to attract aluminum soda bottles.



DAY THREE ~

Students built electro-magnets and used them to accomplish tasks such as moving large quantities of metal objects. They also experimented with static electricity and balloons.

Science in the Summer is sponsored by Glaxo-Smith Kline, a pharmaceutical company.



Letter from the Editors

We hope that everyone had a wonderful and safe summer. As approach this school year we would like to wish everyone good luck in their classes, specifically those involving math and science.

We know that many students struggle with completing their graduation projects and we would like to extend the offer of running the Daedalus to any Sophomore or Freshmen interested in getting an early start on their project.

Should you choose to pick up the project, it will become your responsibility preferable around Mid

-January. If you would like more information regarding this graduation project or would like to contact us if interested please email Vmshirey@gmail.com.

Do not hesitate to take on this amazing project, complete your hours and maybe even present early.

Your editors,
Vaughn Shirey &
Marisa Somich

