HUNSTEM is exited to be involved with
NEwsScience energy: neWscienceenergy.com
We told you a little bit about this project in the
last HUNLetter, but here’s some more info
from their website.
“A new national survey
from the Pew Internet
and American Life pro-
ject delineates how in-
grained video games
have become in youth
culture, stating it is “a
phenomenon with im-
portant implications for
21st century learn-
ing.” Microsoft’s Craig-
Mundie, Chief Research
and Strategy Officer,
stated that “technology
has the potential to help
reinvent the education
process and excite and
inspire young learners
to embrace science,
math, and technology.”

New Science Energy is
an unparalleled collabora-
tive educational pro-
gram developed by
Houston Independent
School District (HISD),
Chevron, and leading
industry, university, and
government contributors.

New Science Energy incorp-orates a computer
game simulation, class-
room energy experi-
ments, strategic industry
mentor support, and an
awards Finale and En-
ergy EXPO at Space
Center Houston. The
program will serve
nearly 6,000 8th, 9th,
and 10th grade students
and 80 teachers.

The game’s simulation
and classroom experi-
ments are aligned with
required TEKS curricu-
ulum but also challenges
students to think analyti-
cally and creatively. The
game simulation will tie
abstract science theo-
rems into real-world
energy solutions within
the context of the next
forty years. Leading en-
ergy companies provide
program content detailing
the frontier of en-
ergy solutions.

The students are Chief
Energy Officers (CEOs)
who must transition their
company from a fossil
fuel based energy sup-
plier to a hybrid energy
supplier that realistically
incorporates efficient,
renewable, and cleaner
ergy. As in real-life,
students will also en-
counter major random
events causing signifi-
cant restrictions or im-
pacting growth. Video
embeds will pop up help
to the player.

Students can play in
teams up to four and can
navigate through levels
1-3. Points will automati-
cally tally within the
game after students
demonstrate compe-
tency in key elements of
earth sciences, biology,
chemistry, physics, and
engineering. Students
can gain extra points if
they complete an opt-in
two page Energy Strat-
egy paper.

Teachers and students
will be awarded certifi-
cates and prizes for the
highest game scores at
the Finale. To augment
the hands-on game
simulation, students and
teachers will be encour-
gaged to design an en-
ergy experiment in any
category such as petro-
leum, wind, solar, bio-
mass, and hydro. As with
the game, the best ex-
periments will win sig-
nificant prizes and be
showcased and pre-
sented at the Finale’s
EXPO."

We’ll keep you up to
date on all develop-
ments, but be sure to
keep an eye on this pro-
ject. It could be really
special.

From the HUN-
STEM Calendar:

- Museum District
  Day
- Eugenie Scott at
  HMNS—
  Distinguished
  Lecture Series
- CAST 2009
- Earth Science Week
- Rockin’ On the
  River
- Go to HUNCal to
  learn more!

Inside this issue:

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  llenge             | 3 |
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Prepare now for Earth Science Week coming up on October 11-17th!
The theme this year is “Understanding Climate” and this promises to be an exciting and challenging opportunity to integrate earth science into many parts of the curriculum.
HUNSTEM will keep you up to date on local events surrounding Earth Science Week through Twitter and on HUNCal, but you might want to check out What’s Going On at the AGI website:
http://www.earthsciweek.org/whatsgoingon/index.html
Since October 1998, the American Geological Institute has organized this national and international event to help the public gain a better understanding and appreciation for the Earth Sciences and to encourage stewardship of the Earth. The AGI site also has a lot of resources for use in the classroom:
http://www.earthsciweek.org/forteachers/index.html
Check it out, and be sure to keep an eye on HUNCal and the Houston Geological Society website for continuing updates.

CAST 2009

WHEN—Thursday, 11/05/09 7:00 AM through Saturday, 11/07/09 5:00 PM
WHERE—Moody Gardens Hotel & Convention Center, Galveston Island Convention Center, and San Luis Resort & Conference Center.

You need your Continuing Education credits, they’ve got ‘em. With over 450 workshops included with your registration and more than 100 optional short courses and field trips, there’s more for you to see and do here than anywhere else in the state.

When you’re not picking up tips from colleagues, pick up some brand new knick-knacks that your kids will love in the enormous Exhibit Hall. Explore the veritable science bazaar full of freebies, prizes, give-aways, swag, loot and booty.

Don’t forget to catch a breath and enjoy yourself! Grab some fajitas and mojitos with your amigos and relax on the beach. It’s beautiful Galveston Island, after all, so soak in as much sun as you can before you’re dragged back to the classroom kicking and screaming.

And remember, CAST registration includes a STAT membership!
Stay on top of what’s going on in Texas science education with our STATFlash e-mail alerts and the quarterly STATellite e-newsletter, and read peer-reviewed articles from your colleagues in The Texas Science Teacher journal.

To learn more about STAT, or to join STAT, go here:
STAT WEBSITE

To register for CAST, go here:
CAST REGISTRATION

If you need more info about CAST before registering, go here:
CAST FAQS
CSTEM Sea Turtle Challenge

Plan now for the CSTEM Sea Turtle Challenge!

The CSTEM Sea Turtle Challenge has become a National program!

In response to the many teacher request with getting started earlier this year, the CSTEM Teacher Training Institute will take place October 29-30, 2009. This will give you more time to plan, work collaboratively with your feeder pattern team, and implement this STEM project at your school.

They can’t unveil the 2010 CSTEM Sea Turtle Challenge as of yet but they want you to know that they are planning some exciting stuff for you (i.e. water race, more robots per campus, more technology per campus, multiple teams within feeder patterns, etc.). They also want to reach more children and parents through the project this year, and for the learning to continue at home.

See http://www.cstem.org for more info.

Rockin’ On the River

You might want to check out the TAAEE (Texas Association of Environmental Educators) 2009 Conference—Rockin’ On the River!

October 22-25, 2009
Texas Tech University Center in Junction, TX
http://www.depts.ttu.edu/hillcountry/junction/

On the beautiful Llano River!

WORKSHOP TOPICS
  Energy and Society
  Plant Ecology
  Macro invertebrates
  Aquatic Ecology
  Sense of Place – Know your Home
  Climate Change
  Science Discovery Stations
  Project Learning Tree
  National Guidelines for EE Excellence
  Wildlife
  And more!

TENTATIVE FIELD TRIPS
  Canoeing
  South Llano State park
  Walter Buck State Park
  Plants of the Edwards Plateau
  Ft. McKavett State Historical Park
  Presidio de San Saba

Tentative Schedule for Conference

Thursday, October 22 – arrive after 5 p.m. (no meals)
Social and Reception
Friday 9:00 am - 5 pm
Workshops and field trips

Evening Entertainment - Rockin’ on the River with Billy B.
Saturday 9:00 am-5:00 pm
Workshops and field trips

Evening Entertainment - Zoology Rocks with Lucas Miller

Sunday 8:00 am – 12:00 pm
Workshops and field trips

REGISTER TODAY! Space is limited. To register visit: www.taaee.org

Also, if you know someone deserving of an EE award, Nominate them! Deadline August 31.

Award categories include:
1. The Service Award will be given to a TAAEE member who has given outstanding service to the organization.
2. The Outstanding Environmental Achievement Award will be given to an individual TAAEE member or group.
3. The Environmental Recognition Award will be given to a business, individual or group from outside TAAEE.

For more information contact, Awards Chair Ruth Hewes, 972-267-639, rehewes@yahoo.com
Twitter with HUNSTEM

We hope you signed up for our Twitter updates after reading the last HUNLetter, but we also want to remind you to check out our Twitter Home Page occasionally too!

**HUNSTEM** follows over 40 of the best sources for science and science education news on the web through Twitter. Each of these organizations post their tweets to the HUNSTEM Twitter Home Page where you can scroll through them to find news, announcements of events, and info on activities. Here are a few of the groups we are following:

- National Science Teachers Association
- Wired Science
- eSchool News
- EarthSky.org
- National Science Digital Library
- Edge.org
- PBS Teachers
- National Science Foundation
- Exploratorium
- Steve Spangler Science
- Dig Science
- Tech Museum
- Tech Crunch
- NPR
- Science News
- Science Friday
- Houston Public Library
- Houston Zoo
- Science Buddies
- Science News
- COSI
- NY Hall of Science
- Science Channel
- KidSpace Museum
- Year of Science 2009

If you haven’t signed up for HUNSTEM Twitter feeds yet, you can do that here: [http://twitter.com/HUNSTEM](http://twitter.com/HUNSTEM)

Go to the Home Page to follow the groups listed here, and more!

SEG Annual Meeting

Will be held in Houston Oct. 25-30 at the George R. Brown Convention Center.

Here’s the link to the meeting homepage.


Click on the Special Events link from the left-hand list to get to information about the Applied Science Education Program.

They are inviting Houston area high school science students (physics, environmental, geology and earth science) to attend the one hour keynote address for free on Oct. 28.

The speaker is Dr. Robert R. Stewart, UH Professor of Geophysics, Cullen Chair in Exploration Geophysics and Director of the Allied Geophysical Lab. The title of his talk is “Extreme Geophysics: from exploring Maya ruins to an Arctic Mars colony”.

The invitations will be mailed to principals and teachers on Sept. 1.
We've just compiled The Best of HUNBlog!

This e-book is entirely my own writing, but there are a lot of other great posts on HUNBlog contributed by Houston area teachers, my students at UHD (pre-service teachers), high school students from our START programs at UHD, and more.

Use the cloud on the HUNBlog main page to find teacher and student blogs.

Comments have not been included in this collection, but there are some doosies. Go to HUNBlog to check out what others have had to say about my ideas, and leave your own comments. It’s never too late!

Here’s one short entry from the book:

**Science Tricks**

Science Tricks — Trick \(\text{trik}\) n 1 : scheme to deceive 2 : prank 3 : knack – trick-ery \(\text{e}text{r}\) n – trick-ster \(\text{ster}\).

I've spent a lot of time in preschool classrooms doing hands-on science. Science magic, or science tricks are effective with young children, but not because they make science fun, rather because they focus the children on the third meaning of the word trick - knack.

The trick to science is, there is no trick!

Unlike a magic trick, science can be explained, and it’s not arcane, mystical or even difficult. All it requires is careful observation.

Care \(\text{ker}\) n 1 : anxiety 2 : watchful attention 3 : supervision.

Careful watchful attention! All of us, even very young children, can understand the world around us if we are helped to observe it with watchful attention.

Science is all around us and we are all scientists.

Science is not the lore of information that has been collected through practice of experiment and observation. It is the process of discovery.

Teaching science to children shouldn't be so concerned with the proper language of the teaching as to lose sight of the real lesson — discovery!

Teachers can model science best by discovering right along with their students.

And, explanations don’t have to be precise. There are many levels of explanation for any phenomenon that are true and appropriate.

Children learn best when their own instincts and observations about their world are shown to fit within a schema, not replaced by “correct” explanations.

Even though I am arguing for discovery teaching over content drill, I don’t mean to imply that the content is not important.

Wow! Gee Whiz! Science serves little purpose other than kindling fascination. Without correct information Science magic lessons are just as likely to produce misconceptions as to avoid them.

But, process-based learning, learning by doing, directed by a competent teacher, allows students to avoid misconceptions and produces science literacy by enabling students to gain confidence in science as well as having fun.
About HUNSTEM

We believe that inquiry-driven, problem-based STEM (science, technology, engineering and mathematics) lessons are the best teaching method to attain increased science literacy.

HUNSTEM promotes the use of inquiry-driven, problem-based science curricula in all classrooms in the Houston area.

HUNSTEM encourages problem-based curricula through collaboration between teachers, school administrators, curriculum directors and developers, and the ISE and professional resources of the Houston community.

HUNSTEM spreads the message of inquiry-driven, problem-based science throughout the Houston area by establishing a vanguard of effective teachers who will encourage and support beginning and science-shy teachers in their schools.

HUNSTEM provides the resources and training for all K-12 teachers of science to become more confident and effective.

HUNSTEM builds professional networks in each area of STEM in the Houston area. HUNSTEM connects these organizations to teachers and families more effectively than they can do through their own efforts.

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