

Blogging about Physics:

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Session C2
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Abstract

- Web 2.0 technologies, such as blogs, give students a great way to express their opinion as well as their understanding. In this session I will show how I have used blogging about issues such as Nuclear Power to engage my students in collaborative learning. I will provide participants with instructions on how to use suitable websites such as edublogs and provide worksheets and guidelines for you to modify for your class.

What I love about blogging!!



What is blogging?

- A Blog (web log) is a website, where users place regular entries of commentary, descriptions of events, or other material such as graphics or video.
- Readers are often able to leave comments in an interactive format.

The Bloggosphere

- personal blog
- vlog
- artlog
- photolog
- moblog
- political blogs

Blogging software

- Blogs are included in Web 2.0 technologies because the software can exist online.
- Great for schools because of
 - *Licensing*
 - *Software installation*
 - *Student access*
- Not so great being online because you have to:
 - *Share it*
 - *Upload/download to and from the internet*
 - *Internet has to be working.*
 - *Not so secure*

Websites

- Sites that I know people use at unihigh:
- Wordpress
- Pageflakes
- Edublogs – I have an account

edublogs

Blogger.com (google)

Blogging software

- Microsoft Sharepoint
 - Sharepoint services
 - Includes a number of technologies:
 - Wikis
 - Discussion boards
 - "Walls"
 - And Blogs
 - Licensed to Ed Dept schools
 - Installed on local server
 - Safe environment (good/bad later)
- Screen dump on next slide

What to blog about. . .

How can we use a blog in Physics

- Blogs are a great way of expressing an opinion. Traditionally this is done in a report. Simply(?) replace any report style assessment with a blog.
- Students group blog (collaborative learning) allows students to work together to create a single submission (wiki?)
- Journal of learning – prac logbook where students are able to reflect
- Posting ideas for others to provide feedback (discussion board)

Study Design Assessment

- Assessment tasks for this unit are:
 - a selection from the following:
 - an annotated folio of practical activities
 - a data analysis
 - a multimedia or web page presentation
 - a response to a media article
 - a summary report of selected practical investigations including maintenance of a logbook
 - a written report
 - a test (short answer and extended response).

Comparison of blog / report

Report

- Student expresses an opinion at home in a report
- Teacher reads opinion and comments
- Teacher assigns grade
- Student can try complaining to teacher about the grade
- Tells other students about it

Blog

- Student expresses an opinion online from home
- Class reads opinion and can add a comment online.
- Student can respond to the comments given
- A discussion can then begin.
- Teacher assigns grade and can include participation etc.

Where to get ideas from!

- Textbook resources
 - Heinemann Physics 11
 - Starting points for investigations
- Media articles
- News broadcasts

Blogging about Physics

CASE STUDY

UHS Case Study

- Unit 1 AOS 3 Energy from the nucleus (!)
- Nuclear issues debate
- Students are required to
 - read all of the text first
 - Read the research topics from text
 - Decide what they are most interested in studying further and research it.
 - Write their response/blog
 - Read other student's blog posts
 - Comment on three other blogs
 - Respond to at least one comment or question.

Blog (CJON)

The University High School Portal > Students > vCE > Science > Year 11 Physics > Blog (CJON) > Posts > Increased Australian Uranium Mining v. Nuclear Terrorism

4/7/2009

Increased Australian Uranium Mining v. Nuclear Terrorism

Although Australia would experience much benefit from increased uranium mining, for some the spectre of nuclear terrorism looms threateningly over modern society. A great fear for many relates to terrorist organisations obtaining enough nuclear fuel to create a bomb and possibly using this in an attack on a major urban centre. This fuel, most likely in the form of U-235-uranium, would either be obtained from rods on nuclear waste sites or disruption of trade routes (shipping routes) along which uranium ore is transported.

Because of this threat, many Australians believe that if uranium mining was to become more widespread in Australia, with more fuel being on international markets, there would be a greater risk of terrorism.

However, the benefits of increased uranium mining in Australia outweigh the possible consequences of these actions. Nuclear terrorism is an exaggerated threat, because in general, much of the general public has a great fear of the immense power generated by any form of nuclear reaction. For example, the medical test of PET (Positron Emission Tomography) has the 10 for nuclear control from the element even though the process doesn't involve fusion, fission or radioactive decay of any sort (but instead radiocarbon), because many people feel that anything related to disturbing the nuclei of atoms is extremely dangerous. This is true, but with the right technology and expertise this is not so. In fact, the production of nuclear power is an extremely safe industry as the world nuclear organisation has said: "The risks from modern nuclear power plants, in terms of the consequences of an accident or terrorist attack, are minimal compared with other commonly accepted risks." This is supported by evidence.

This makes nuclear terrorism more of a perceived threat than an actual threat because safeguards on nuclear waste and trade routes are extremely high making the extent at which a terrorist organisation would have to apply itself and the loss of expertise such an operation would entail would create a situation where obtaining nuclear fuel is more effort than it is worth for the terrorist groups.

Also, uranium mining is not anti-green, as research into newer, more efficient methods of power generation is being pursued, and the potential exists for nuclear power to become a vital source of Australia's energy in our efforts to combat climate change.

Because nuclear terrorism is an overstated threat, uranium mining in Australia is therefore an industry that must be investigated, because in the current economic situation, it would be better to create new jobs by expanding an industry and create more potential export dollars for Australia than to waste the money, time, smoke and mirrors as excuses for inactivity.

Posted at 10:31 PM by Peter HALL | Category: Nuclear Waste | Permalink | Email this Post | Comments (3)

Increased Australian Uranium Mining v. Nuclear Terrorism - Blog (CJON) - Windows Internet Explorer provided by University High

File Edit View Favorites Tools Help

https://portal.unhgv.vic.edu.au/student/uvce/science/physics11/blogon/ata/Post.asp?ID=154

Comments

Mining

What is the level of terrorist threat associated with uranium ore? Is the mining operation itself very 'green'?

Christopher JONES at 6/3/2009 9:21 AM

Re: Increased Australian Uranium Mining v. Nuclear Terrorism

Peter, well written. I believe that uranium mining in Australia should be investigated and that the positives definitely outweigh the negatives. In the first paragraph you wrote U-235-uranium, isn't it Uranium-235?

Munya AHMED at 6/3/2009 9:26 AM

Kill the Bourgeoisier!

All capitalists should be taken out of their offices and shot in the face with DU bullets to ensure death of the "human" and of its ideals. I plan to achieve this by reprocessing fire-alarms. Good works.

Ruby HEALER at 6/3/2009 9:32 AM

Re: Increased Australian Uranium Mining v. Nuclear Terrorism

Great post!

Eugene NHEU at 6/3/2009 9:35 AM

(to Mr. Jones)

The threat from terrorist organisations obtaining uranium ore is extremely low, as the enrichment process required to develop a bomb from ore is very expensive, far too much so for a terrorist organisation without government support. Enrichment facilities would also be very conspicuous, so it would be hard to remain underground with this kind of operation in action. On the other point, uranium can't be mined in the same way as coal, as that would create a contaminated area far too large to be sustainable. Uranium mining is more costly and less 'green' than coal mining but "every tonne of mined uranium used for fuel in place of coal saves the emission of 40,000 tonnes of carbon dioxide." (science.org.au) so in some ways the benefits outweigh the disadvantages of uranium mining. Also, coal mining has a strong negative impact on the environment and this must be taken into account, unless we consider other nuclear alternatives on a large scale (seemingly unlikely in the present situation).

Peter HALL at 6/3/2009 9:47 PM

Add Comment

Title

Body *

Submit Comment

Downside

- Takes longer to complete the Assessment task.
- You may need to teach some/all of the students how to use the software
- Need access to school computers (if giving class time)
- Student need to access UHS intraweb from home or otherwise stay at school.
- Students cannot post blog late or their work is not there for other students to read and comment.
- Some students do not take the task seriously.
- Opens the class to 'online bullying' types of behaviour.

Upside

- Students are writing their response to an audience of their peers.
- They get to read more than one response and can often see an opinion different to their own.
- They can reflect on their own work and formulate responses
- They get to have the final say (maybe)
- More motivated
 - *the quality of work was very good*
 - *Students more eager to have discussion*
- Less copying from Wikipedia

Upside (continued . . .)

- No paper – but some students will still print the ones they want out
- Students get to see the quality of other students work.
 - *Great for lower achieving students*
 - *Great for ESL*
 - Draft work and edit response
 - Can read other examples before starting
- Assessment can be performed by peers (more later)

Blogging about Physics

LEARNING HOW

Go and Blog

- Try out your own blog.
- If you are going online, set up a hotmail account or something like it that you can get rid of if too much spam starts arriving
- I use
 - cjunihigh@hotmail.com
 - cjunihigh@gmail.com
 - Christopherjones@live.com.au
- Each provider will often have their own account.

Write a second blog (?)



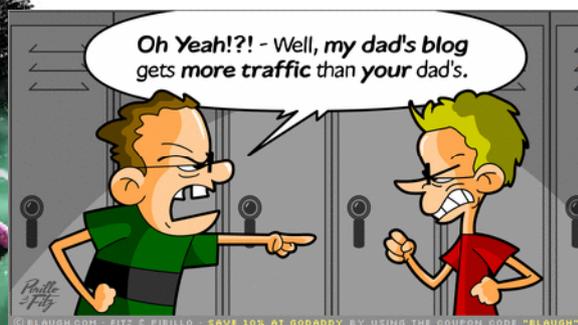
Rules - cybersafety

- How many schools have a code of conduct?
- ICT or Computer use policy

Concerns

- Online Avatars:
 - *Are you talking to who you think are?*
- Who can see what you are saying?
- "Would you let your mother read it?"

cyberbullying



Have access to technical support

- Other teachers that use blogging
- Need to ensure that your students are safe or that you took precautions to only allow access to the blog by registered users etc.

Blogging about Physics

ASSESSING A BLOG

Assessment Criteria

- You can assess the blog the same way you assess a written report.
- BUT you can also add
 - *Participation*
 - *Cyber-behaviour*
 - *On time submission*
 - *Quality of comments/questions*
 - *Student's response to your comment/question*
 - *Can take into consideration other students comments on the blog (opinion)*

Will you blog this year?

