Tom Feilden's Blog, BBC, 01 October 2008

Homework no. 8 – Which type of research is more important? Blue skies research versus applied research

This is the last homework of the semester and you need to write a paragraph, 200 words with an Essay Map on which type of research (blue skies or applied research) is more important. If you are not sure of the difference the following text should help you. As before don't forget to do a <u>spell check</u> and <u>word count</u>.

Should science be about discovery for its own sake or about solving the most serious problems of the day?

It's a question that's almost as old as science itself. The earliest reference I could find comes from Plato's Republic, where Socrates takes Glaucon to task for worrying about whether astronomy is a worthwhile pursuit.

But it's also a question that's got today's scientists arguing amongst themselves.

Blue skies research – fundamental, curiosity driven research, osnovna istraživanja

Applied research – primenjena istraživanja

Pursuit – aktivnost

For its own sake - radi sebe same

To take to task – grditi

Worthwhile – vredan

The former chief scientist Sir David King <u>sparked off the row</u> when he said it was "astonishing" that we were spending so much time and money on the Higgs Boson when there were much more pressing problems like climate change and environmental degradation to address.

Chief scientist – ministar nauke

To spark off the row – izazvati svađu

Astonishing – iznenađujući

Pressing problem – hitan problem

Degradation – propadanje

To address - rešavati

His timing - he made the speech on the day the Large Hadron Collider was switched on - also seemed designed to provoke.

And what a reaction he got. It takes quite a lot to get Lord Rees, the president of the <u>Royal Society</u>, riled up, but he branded Sir David's comments both "misguided" and "mistaken".

Timing – vremenski trenutak

Design to – planirati da

To provoke – provocirati

Royal Society – Britanska akademija nauka

To brand – označiti

To rile up - iznervirati Misguided – pogrešno usmeren

Perhaps more worrying has been the steady swing of the funding pendulum towards applied research. The government has been rightly applauded for a big increase in the science budget, but increasingly ministers - and the Treasury - have emphasised tangible applications and quantifiable benefits.

Swing of the funding pendulum – preusmeravanje finansiranja

To applaud – pohvaliti

Treasury – Ministarstvo finansija

To emphasize – naglasiti

Tangible – materijalan, konkretan

Quantifiable benefit – merljiva korist

Of course, there's nothing wrong with wanting to see a return on investment, or on insisting that money is efficiently spent. But 'picking winners' is a fool's game.

As Sir Chris Llewellyn Smith (the man who commissioned the LHC) says, it's not a zero sum game: you must have both blue skies and applied research.

Return on investment – povraćaj investicija, zarada

To commission – pustiti u rad

Zero sum game – nulta suma u teoriji igara (Game Theory)

One of the comments to this blog post that can give you an idea how to think about this essay question/what aspects to consider:

Sunnysideman wrote: When questioned about blue sky research I always quote the discovery of electricity in the 19th century. At the time it was regarded as an interesting phenomenon with no practical application but look where it took us. Similarly the head of the US patent office said about a hundred years ago that all of the important discoveries had been made.

To quote – citirati, navoditi To regard as – smatrati Practical application – praktična primena Similarly – slično Patent office – Patentni zavod One of the comments to this blog post that can give you an idea how to think about this essay question/what aspects to consider:

Now, regardless of other spin off from building the thing, imagine if the LHC started us on a road towards understanding how gravity works and how to manipulate it. Science is much too important to leave to politicians who just think of the next election.

Regardless – bez obzira

Spin off – nastavak, dodatne pogodnosti

To manipulate – koristiti, rukovati sa

Election-izbor