## **SciFest Scientific Integrity?**

Hello SciFest Team,

I find myself this weekend in the strange circumstance of writing 2 opposing letters. One in praise of a teachers' party to O'Connor's pub management and one of constructive criticism to a Science Party management.

To the point: your SciFest concept and goals page states – *med bibehållen integritet för det vetenskapliga innehållet*. There seems to be good evidence and argument that the word "integrity" here should be deleted.

Please make no mistake, we at Uppsala International School – Kvarngärdesskolan were very happy to display our Manganese Colour Chameleon Chemistry Experiment workshop in stall 28 at SciFest 2016. We were able to inspire the joy, fascination and wonder of pure science in young children and parents as well as in school classes and their teachers. To transfer knowledge is the primary purpose in a society of any academic institution. We achieved our aim. We hope to be allowed to repeat this success in 2017 too.

Ulf Danielsson (from Ångströms) and others recently in DN (*Skolvereket har djupa problem*) have been taking Skolverket to task for promoting pseudoscience to school students. They point out the need of critical thinking in checking any evidence by using the scientific method. Not just believing because "the majority says"; "authority says"; "emotion means", calling names (ad hominem) etc. As school teachers we too notice that when complaining to Skolverket about science national test "facts", comes the reply: "We are right, we are many, you are few, come join us" without deeper scientific explanation. SciFest seems to be adhering to Skolverket's way of dealing with science disputes. As evidenced at our SciFest stand.

I was speaking to a few of our international scientist parents and they assured me that in Sweden the environmental movement "science" was not to be questioned. I had seen lots of evidence for this over the years since settling in Sweden. One parent said that currently in Sweden, it was just like the PETA animal rights activists in the southern United States today. I thought that viewpoint might be a bit extreme. However within a few hours a number of our critical thinking about science-in-society posters were taken down by the SciFest PR people. Critical Thinking is 1/3 of a student's Skolverket science grade. Hmm...

The reasons given by the SciFest PR people were: "might be misinterpreted"; "bad wording"; "not mainstream"; "against the consensus"; "we don't want bad publicity"; "not a majority viewpoint"; "might encourage dispute"; "there have been complaints"; "the science is settled"; "there is no debate" etc. I fully agree that censoring these "offending" science posters was completely the correct thing to do ... if SciFest is just another popular business venture. But these explanations go against the basic nature of the scientific enterprise. These "reasons" for deletion are the same as have been used to stifle scientific debate and progress over the last 500 years.

Anders Ekström (Uppsala University) on P1 Radio recently argued there was nothing new with the current Media "end-of-days & exaggerated" world viewpoint (a viewpoint apparently supported by SciFest), pointing out specifically climate & environment as problem areas. But even UNT last Friday argues that facts point to a much better world (*Misären är undantag*). One of our critical thinking about science-insociety posters that was taken down was of a smiley-faced Earth. However the opposing negative viewpoint put strongly forth by the Friends of the Earth stand upstairs was retained. SciFest popularism bias again?

Another of our posters that was censored was just "for" and "against" screenshots of "Lions going extinct ... or not?" debate articles. Maybe this offended some activist at WWF or Greenpeace? Another taken down was about the chemical Phosphorus ("Running out or not?"- with evidence from the USGS). Wow, which special interest group did that offend? And finally censoring the offending climate poster, pointing out an opposing scientific evidence-based viewpoint ( $Nature - 24 \ Feb \ 2016$ ). The latest EU Barometer Survey now shows that Swedes are the most aware (scared?) of environment issues: 5x - 20x more than other European countries (& the world). That EU survey poster was allowed to stay up by the SciFest PR people. Well done.

I should note that our international (IGCSE) British science (biology, chemistry, physics) school student textbooks on display were left untouched by the SciFest PR people. These books, used in international schools around the world, also contain the same opposing scientific evidence-based viewpoints about climate and environmental issues. The EIS schools in Sweden also use these books, and the IB schools have similar books. I would suggest that the SciFest PR people have a big job in front of them. But apparently UNTs climate activist & reporter Johan Heimer might willingly apply for that job..... Just joking ©

Seriously again - US & UK universities are now being rocked by the "trigger warning"-"safe space"-"free speech zones" controversy. Even President Obama has stepped in encouraging universities not to block out "offensive" opposing evidence based viewpoints. At SciFest it appears that students & other participants must "walk on egg-shells" if they dare produce unpopular evidence about current science debates. How sad. A remedy could be to invite in opposing viewpoints for a SciFest debate. If this is unthinkable (unallowable) then maybe that just proves the point. As it is said: evidence based argument is the lifeblood of science.

I must hasten to add that most workshops & presentations at SciFest had an excellent level of displaying the true nature of the scientific endeavour eg. Forsmark's static electricity & Geocentrum's earthquake maker. However a scientist might wonder at others. Vattenfall had virtually no science at all. Just promoting its business, only with a few scary words about saving-the-planet and how children could influence politicians and change their lifestyle with post-its. Zombie Apocalypse was hugely popular, making SciFest even more exciting ... but had very tenuous links to science – "samhället är mer sårbart än på mycket länge" – which is strongly disputed internationally eg <a href="http://humanprogress.org/">http://humanprogress.org/</a> Opposite our stand we even had someone selling new-age looking CO2 paintings. Is this the new "interdisciplinary" SciFest? Hmm... I was surprised Naomi Klein's new anti-capitalist film was not running (now showing in Tierp schools).

Will this letter change SciFest? No. Will the constructive criticism above even be considered? No. I am under no illusions. Swedish science school children are now the laughing stock of Europe (& the world) due to their lowest & declining OECD scores on PISA & TIMMS tests. SciFest has enormous potential to change this but is seemingly sliding (being pushed?) into popularism instead. There are a lot of excellent scientists presenting at SciFest. However, SciFest is believing its own PR. Numbers (8700) are more important than knowledge. Right thinking more important than critical thinking. SciFest expanding by "interdisciplinary shows" instead of filling its workshops with school classes. Science is presented as a fearful future rather than a quest for knowledge, as the taxpayer and society expects of us. No wonder science teachers keep their classes away. Save-the-world activists, business money makers & cross cultural groups, and even censoring school critical thinking projects, are thought OK for SciFest.

So, SciFest Team, your group thinking that science is about having "the right opinions" rather than based on scientific evidence and logical "vigorous" argumentation, seems disconcerting. There is evidence that the word "integrity" on your web page could be better replaced by "populist", "progressive", "placating The Media", "profitable", etc. It would appear that scientific integrity in SciFest's case would be upheld best by taking out the word "integrity".

Best regards,

**Brady Caldwell**Science Teacher

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