Freedom of Information Act 2000 (FOIA)

Decision notice

Date: 4 May 2020

Public Authority: The Council of the Open University
Address: Walton Hall
Kents Hill
Milton Keynes
MK7 6AA

Decision (including any steps ordered)

1. The complainant has requested information associated with an article published on the Open University's 'OpenLearn' resource. The Open University's position is that it does not hold information falling within the scope of the request.

2. The Commissioner's decision is as follows:

   - On the balance of probabilities, the Open University does not hold the requested information and has complied with section 1(1)(a) of the FOIA. The Open University breached section 10(1) however, as it did not confirm it does not hold the requested information within 20 working days of receiving the request.

3. The Commissioner does not require the Open University to take any remedial steps.

Request and response

4. On 30 June 2019, the complainant wrote to the Open University ('the OU') and requested information in the following terms:

   "Please forward this email to Janet Sumner. She may correspond with me directly, if she wishes.

Janet, I have read your 'revisions to the article'. May I please raise some issues with you?

You have omitted any reference in your article to assumptions made in arriving at the radiometric dates stated. Interestingly the date for the demise of the dinosaurs, previously 'exact', has increased rather mysteriously, by 1,000,000 years!! I would appreciate an explanation for the increase.

Please forward the mathematical calculation, equation or formula that you have used that gives the radiometric dating results you claim in millions or billions of years, without the addition of assumptions. If assumptions were made in the mathematical calculation, please indicate same.

From Evolution, The Greatest Deception in Modern History, Roger G. Gallop, Ph.D., Red Butte Press, Inc., Jacksonville, GO 32246:

p259, 'According to RATE project scientists, 'It appears that all three of these dating essentials commonly fail at some level'. (a) No analytical equipment or technique can 1) test the constancy of the decay rate, 2) determine if the system was open or closed, or 3) determine the initial condition in the rock. Isotope concentrations of ratios can be measured accurately, but isotope concentrations are not dates, but rather interpretations of data based on assumptions that are plagued with multiple flaws - yet scientists contend as fact what they cannot prove. Scientists are simply unable to look at a rock specimen and tell you if the amount of daughter isotopes was the result of accelerated nuclear decay, or if there was mixing or inheritance of daughter isotopes from crustal rock at the time of cooling, or the amount of daughter isotopes at the start of creation and earth's formation. The bottom line is that these dates are meaningless'.

(a) DeYoung, D (May 2006), Thousands ... Not Billions. Master Books, Green Forest, AR, 120, 139.

(The three assumptions: constant rate of decay; no loss or gain of parent or daughter isotopes, assumes closed system; known amounts of daughter isotopes present at the start.)

From, The Sun Alters Radioactive Decay Rates, BY BRIAN THOMAS, PH.D. | FRIDAY, SEPTEMBER 03, 2010 - Institute for Creation Research:

In 2009, New Scientist summarized a mysterious and inadvertent discovery. Brookhaven National Laboratories physicist David Alburger

found that the nuclear decay rate of silicon-32 changed with the seasons. (i)

In a separate but similar instance, Stanford University reported that Purdue physicist Ephraim Fischbach accidentally found that nuclear decay rates sped up during the winter while analyzing data from both Brookhaven and the Federal Physical and Technical Institute in Germany. (ii)

The conclusion was that something from the sun must be affecting the decay rates, and researchers suspect that solar neutrinos may be the cause.

(i) Mullins, J. 2009. Solar ghosts may haunt Earth's radioactive atoms. New Scientist. 2714: 42-45.

(ii) Stober, D. The strange case of solar flares and radioactive elements. Stanford Report. Posted on news.stanford.edu August 23, 2010, accessed August 25, 2010

Peter Sturrock, a Stanford physicist and expert on the sun's core, reviewed several technical papers that showed these odd correlations between the sun and radioactive systems. He knew that the sun's core rotates at a regular rate and has a "face" side that emits neutrinos more intensely. When the core's face swings around and is aimed at the earth, then the earth receives a more concentrated neutrino blast.

Sturrock found that every 33 days, when that part of the solar core faces earth, there is a corresponding change in the decay rate of radioactive materials.

From, It's Official: Radioactive Isotope Dating Is Fallible, BY BRIAN THOMAS, PH.D THURSDAY, JANUARY 21, 2010 - Institute for Creation Research:

Although it is apparent that millions of years worth of decay—at today's slow rates—has occurred in isotope decay systems, it is clear that the decay occurred rapidly, during a period of extreme acceleration. Only in this way could Helium have become trapped in granites,8 Polonium radiohalos have left their signatures,9 and other microscopic scars called "fission tracks" have formed.10

(8) Humphreys, D. R. 2003. New RATE Data Support a Young World. Acts & Facts. 32(12).

(9) Snelling, A. A. 2002. Radiohalos—Significant and Exciting Research Results. Acts & Facts. 31 (11).

(10) Snelling, A. A. 2005. Fission Track in Zircons: Evidence for Abundant Nuclear Decay. In Vardiman, L., A. A. Snelling and E. F. Chaffin, eds., Radioisotopes and the Age of the Earth: Results of a Young-Earth Creationist Research Initiative. El Cajon, CA: Institute for Creation Research, and Chino Valley, AZ: Creation Research Society.

May I suggest the carbon-14 reference to 2 million years is excessive. A date of around 100,000 years would perhaps be more appropriate, as carbon-14 would either not exist or be undetectable at that stage. (refer: Rethinking Carbon-14 Dating: What Does It Really Tell Us about the Age of the Earth? BY JAKE HEBERT, PH.D. | FRIDAY, MARCH 29, 2013 - Institute for Creation Research).

I have given many reasons and examples indicating radiometric dating is not tenable without assumptions, with rocks of known age radiometric dated incorrectly and different radiometric dating techniques giving different results for the same rock sample and that said radiometric dates placed in the public domain, by the OU, should include a full, candid and complete explanation, including any assumptions made, so that the public can make an informed decision.

May I ask Janet, do you agree with all I have said both above and below? On the OU website and all other OU public outlets, are you going to place all information on radiometric dating before the public?"

5. The OU responded on 21 August 2019. It advised that it had already responded to the complainant to say that no new calculations were made for the article referred to in his request and no assumptions are recorded. OU said that information on radiometric dating is in the public domain and that a reference book had been suggested to him.

6. The complainant requested an internal review on 26 August 2019. On 5 September 2019, the OU provided a response to the further questions the complainant had asked in this correspondence.

7. OU provided a review of its response to the 30 June 2019 request on 28 October 2019. It confirmed that it considered some parts of that correspondence did not constitute a request for recorded information. However, OU acknowledged that there had been shortcomings in its response to another part of the complainant's correspondence which was a request for recorded information. This part is specifically:

"Please forward the mathematical calculation, equation or formula that you have used that gives the radiometric dating results you claim in millions or billions of years, without the addition of assumptions. If

assumptions were made in the mathematical calculation, please indicate same."

8. The OU confirmed that it does not hold this information.

Scope of the case

9. The complainant first contacted the Commissioner on 6 June 2019 to complain about the way his request for information had been handled.

10. Having considered the OU's submission the Commissioner advised the complainant that she was satisfied that the OU does not hold the recorded information he has requested. She invited the complainant to withdraw his complaint, an invitation he declined. The complainant is clearly not satisfied with the article in question. However, as both the OU and the Commissioner explained to him, the FOIA concerns information held in recorded form; it is not a route through which to engage in a debate with a public authority about a particular subject, or by which to submit a complaint to an authority about its perceived failings.

11. The Commissioner's investigation has focussed on whether, on the balance of probabilities, the OU holds information falling within the scope of the complainant's request, and the timeliness of its response.

Reasons for decision

12. Under section 1(1) of the FOIA anyone who requests information from a public authority is entitled under subsection (a) to be told if the authority holds the information and, under subsection (b) to have the information communicated to him or her if it is held and is not exempt information.

13. Section 10(1) of the FOIA requires a public authority to comply with section 1(1) promptly and within 20 working days following the date of receipt of the request.

14. In its submission to the Commissioner, the OU has first set out its understanding of the background to the complainant's request. It notes

that on 30 June 2019 he requested "the mathematical calculation, equation or formula that you have used" in an article on "OpenLearn"[1].

15. OU says that OpenLearn is not part of the University's provision for enrolled students but is a free educational website open to anyone and is part of the University's commitment to wider learning across the community. The article which the request is related to - " Rock Clocks" - is hosted on the section of the website called "explore subjects. There, accessible information is posted to enable members of the public to browse subject categories and explore new topics; to provide a "taster" of an academic subject in an accessible format. The articles are not academic in format and do not, for example, include the rigorous referencing required in academic papers.

16. In this case, the author Janet Sumner, in a short article (about 1000 words) describes how the history of the climate can be discovered in clues left in the rocks; as a part of that explanation Ms Sumner refers to the radiometric date of the end of the dinosaurs - 66 million years ago. The complainant's request refers to that reference; he is seeking the calculation, equation or formula used by the University to give those radiometric dating results. The OU says the complainant appears to be referring to the version of the article published on 19 June 2019. An earlier version (2005) referred to a different date but the science has developed over the last 15 years, and the revised version made that update. The OU notes that the complainant refers to this revision in his correspondence: "*Interestingly the date for the demise of the dinosaurs, previously 'exact', has increased rather mysteriously*".

17. The OU has told the Commissioner that it has interviewed Ms Summer in relation to this specific article; she estimates that the revisions made in June 2019, which included the date in question, would have taken her about 90 minutes to update after reviewing respected academic journals. She drew the date from the summaries in those academic journals not the specific calculations within them. She has no record of which journals she used and would not, in any case have accessed the calculations themselves because they were not necessary for this informal, accessible article in Openlearn.

18. Having reviewed the Commissioner's published guidance on whether information is held, the OU says it explored whether there were any practical, business or regulatory reasons to hold such a record. First, the text was not a formal academic article with specific referencing and

[1] https://www.open.edu/openlearn/science-maths-technology/science/geology/rock-clocks

retention requirements, second previous experience had not indicated that retention of such records was necessary; and finally, the cited radiometric dating of 66 million years is now a settled position within the academic community. This radiometric date (as the OU sets out in more detail below) is frequently referred to in academic journals and is available in the wider public realm including Wikipedia https://en.wikipedia.org/wiki/Cretaceous%E2%80%93Paleogene_boundary.

19. The OU says that, in summary, Ms Sumner made no record of the specific source of the date she referred to and there are sound justifications why this is the case. However, Ms Sumner believes she accessed the date through "Google Scholar"- a freely accessible web search engine that indexes the full text and/or metadata of academic literature.

20. The OU therefore considered the Commissioner's guidance on whether third party online data can be considered as information held and the cited case of Glen Marlow v the Information Commissioner (EA/2005/0031, referred to in the guidance). The OU says it recognises the argument that information from a third-party subscriber that is selected, downloaded and saved to the public authority's own computer and/or printed off would be held by that authority. But the OU cannot see how that principle applies in this case: Google Scholar is not a subscription service and Ms Sumner did not download, save or print the specific journal articles she used to reference the date.

21. The OU has confirmed that it has not carried out a search of Ms Sumner's search activity as the search would not identify which calculations were directly used as were none were used, nor would it necessarily even identify which journals were referred as she regularly uses Google Scholar for a variety of purposes. Such a search would also be difficult to carry out as time has elapsed and Ms Sumner carried out these searches on her private computer using her personal web identity.

22. The OU recognise that technically this search history, as it relates to Ms Sumner's work with the University, could be information held by a public authority, but it does not believe such a search would identify the information requested. It also considers it would be disproportionate to attempt such a search. In addition, carrying out a search, which could also capture Ms Sumner's personal search history, could potentially contravene the OU's obligations, as controller, to her as a data subject, under the Data Protection Act.

23. In conclusion, the University has confirmed that it upholds its original position that it does not hold the mathematical calculation, equation or formula used for the cited article. It has, however, emphasised its

willingness to resolve the complaint by informal means. Its offer for a member of the faculty to discuss the enquiry over the telephone with the complainant still stands – an offer that the complainant has declined. The OU was also willing to share with the complainant the following journal articles which Ms Sumner has identified that she *may* [the Commissioner's emphasis] have used to verify the cited date:

- "Rene at al (2013, Science, Washington, vol 339, no6120, p 684-687)" https://science.sciencemag.org/content/339/6120/684
- "Hennebert (2014, Notebooks on Geology, vol 14, , no 9, p173-189)" http://paleopolis.rediris.es/cg/1409/

24. The OU noted that this information is not the information the complainant specifically requested. However, the OU hoped it might help to resolve the complaint as it should provide the complainant with what he appears to be fundamentally seeking - a source for the cited date.

25. As she advised the complainant, the Commissioner entirely accepts the OU's explanation and position regarding the specific information he has requested. Regarding any information published online, Ms Sumner may (or may not) have viewed information published online to inform her article. If she viewed information but did not download it (and the Commissioner sees no reason why that would have been necessary) she cannot be said to hold any information she may (or may not) have identified and viewed through that source. The Commissioner is satisfied, on the balance of probabilities, that the OU does not hold information falling within the scope of the complainant's request. The Commissioner considers that the OU's assistance to the complainant and reconsideration of the request to have been satisfactory and thorough.

26. The complainant submitted his request on 30 June 2019 but the OU did not clearly confirm that it does not hold the requested information until 28 October 2019. Because the OU provided this confirmation at the point of its internal review, the Commissioner finds that the OU complied with section 1(1)(a) of the FOIA. However, the OU breached section 10(1) on this occasion as it did not comply with section 1(1)(a) within 20 working days.

Right of appeal

27. Either party has the right to appeal against this decision notice to the First-tier Tribunal (Information Rights). Information about the appeals process may be obtained from:

    First-tier Tribunal (Information Rights)
    GRC & GRP Tribunals
    PO Box 9300
    LEICESTER
    LE1 8DJ

    Tel: 0300 1234504
    Fax: 0870 739 5836
    Email: grc@justice.gov.uk
    Website: www.justice.gov.uk/tribunals/general-regulatory-chamber

28. If you wish to appeal against a decision notice, you can obtain information on how to appeal along with the relevant forms from the Information Tribunal website.

29. Any Notice of Appeal should be served on the Tribunal within 28 (calendar) days of the date on which this decision notice is sent.

Signed

Pamela Clements
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SK9 5AF