Contextualising the Curriculum Through the History of Mathematics: An Online, Open Access Resource

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LMS Education Day
De Morgan House, London
24 May 2023
Why ‘Contextualise’ the curriculum?

- Awarding Gap at The Open University
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- Demand for ‘history of the gender gap’ talks
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- Decolonising the Curriculum
A database of primary sources

▶ Image(s) of the source to be looked at
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- Transcription (with image descriptions and translations where necessary)
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- Context and user notes
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▶ Discussion questions and assessment suggestions
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- Discussion questions and assessment suggestions
- Further reading
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▶ Further reading

▶ Tags for making the database searchable
Organising/tagging the sources

- Mathematical
  - Subjects: geometry, calculus, algebra, applications, ...
  - Ideas: coordinate systems, functions, infinity, derivative, ...

- Geographical

- Language

- Chronological

- Biographical

- Other
  - Other subjects: Art, music, design, engineering ...
  - Education: Textbooks, lectures, examinations ...
  - Communication: Correspondence, journal article, learned society, congress/conference ...
  - Target Audience: Undergraduate, Sixth form/college, high school ...
DETERMINATION OF AZIMUTH ANGLE AT BURNOUT FOR PLACING A SATELLITE OVER A SELECTED EARTH POSITION

By T. S. Skopinski and Katherine G. Johnson

Langley Research Center
Langley Field, Va.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON

September 1960
Usual practice for these technical papers was that they would be combed through by mathematicians and engineers, to whom the authors would defend their results at editorial meetings spread over 10 months or more. This paper was the first instance of a woman in the Flight Research Division receiving credit as the author of a research report.
“This establishment [NACA] has urgent need for approximately 100 Junior Physicists and Mathematicians, 100 Assistant Computers, 75 Minor Laboratory Apprentices...”
Telegram, May 1943 [Quote from Page 1, Hidden Figures]
"Around half of those in the Tier 1 workforce [where mathematical sciences qualifications are essential] have estimated salaries of £29,000 or above, compared with only 19% of the UK workforce."

‘The maths curriculum our students learn remains the same’, said a Durham spokesman in response to the Telegraph story. ‘But we also encourage students to be more aware of the global and diverse origins of the subject, and the range of cultural settings that have shaped it. Two plus two will always equal four.’
Humanising Mathematicians

Sitting on the Female Bus

From 1950 to 1952, I was at the Princeton IAS. The institute was quite far from the town of Princeton. Hence the faculty and staff who did not own a car had to take a bus from Palmer square to the institute. There were two buses, one with a male driver and the other with a female driver. And this bus with the female driver would pick up the mail from the post office by Palmer square and deliver to the IAS. Now this was not a written rule, but when the male driver came, the men rode the bus and when the female driver came, the ladies rode on the bus. However, one day I was running late and waiting for the bus at Palmer square when the bus came with the female driver, and looking in, I saw there was still some room for 2 or 3. So I said “I’m in a bit of a rush, may I ride the bus?” but the driver answered “Don’t you know this is the women’s bus?”. I immediately replied “I do know but I heard that you deliver mail as well.” Entertained, the bus driver said “This Japanese is pretty clever,” and I was able to make it on time.

*Pleasant Mathematicians* by Kentaro Yano, tr. by Shoo Seto.


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