

We all Know Fun Maths—But Where is the Theoretical Foundation?

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Tuohilampi and Attard (2024) identified an interesting void in the realm of teaching mathematics: while there are several millions of teaching resources available on the Internet presented as ‘fun maths’, peer-reviewed research literature rarely addresses this key term. Fun maths is mentioned in peer-reviewed studies that address games or gamified learning (Darragh, 2021). Fun as easing the learning of mathematical content (Fouryza et al., 2019), versatile learning activities, such as playful, physical learning (Bustamante et al., 2022) and mathematics being embedded in real life phenomena (Eubanks-Turner & Haji, 2015). Fun maths seems to have a place in the lexicon of teachers of mathematics; in this short communication, we will discuss how to take a systematic look at fun maths in research literature.

Fun Maths is a Practical Term

Amazon gives over 50,000 results for ‘fun maths’ (tested 24th of August 2023); using web-based search engines, such as Google, one can find several million hits (952,000,000 results, tested 31st of January 2023 using Google). Interestingly, using the same search term in research databases does not reflect this abundance of teaching resources. ERIC lists just 97 peer reviewed journal articles with the same keyword from the last 20 years.

To start unravelling this misalignment, Tuohilampi and Attard (2024) conducted an initial review of four peer reviewed research articles published after 2019, all using the key term fun maths. This initial review identified that: (1) fun maths can be used to describe the nature of an activity, learning experience or teaching approach; (2) it is not always clear how fun maths can contribute to learning ; and (3) the term can be used non-purposefully, e.g., having it in the title but never using the it in the body text. The first overview suggests a practical, all-encompassing definition: fun maths could feature almost any positive aspect of mathematics learning.

Multiple questions remain unanswered: Who is the intended audience for fun maths activities or approaches? Is there any theoretical framework or pedagogical principles behind fun maths? When fun maths is connected to any outcomes, is there any evidence or data regarding the effectiveness? What specific activities or approaches are proposed to connect with fun maths? Without a clearly defined concept it is difficult to review the needs for ‘fun maths’. In this short communication, I will discuss the challenges related to the ubiquitous, yet vaguely defined concept of fun maths. What are we talking about, when we talk about fun maths?

References

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