

ZMATH 2016b.00399

Shaw, Christopher

Quantitative literacy – problems that motivate.

Ohio J. Sch. Math. 72, 1-7 (2015).

Summary: In this article, I present a selection of problem types, with examples, that have been used with some success to motivate the topics in a quantitative literacy class so that learners may begin doing mathematics without period of discussion beforehand. In their original use, the setting for these problems is a small class at a large liberal arts college, but I hope that the work described within will still have some value for teachers of high school students, especially in classes where many learners struggle to appreciate mathematics. The approach outlined in this article is inspired by the methods of Inquiry-Based Learning, “a teaching approach which intends to promote learning by engaging students in any of the processes or activities typically involved in scientific research . . . ”.

Classification: D50 D40

Keywords: quantitative literacy; approach; motivation; problem posing; inquiry-based learning; student activities; real-life mathematics; mathematical applications; sport; darts; simultaneous linear equations; rounding; approximation; combinatorics; Pascal’s triangle; operational efficiency; numeracy; mathematical ability; mathematical literacy