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Gerdes, Paulus

On mathematics in the history of sub-Saharan Africa. (English)

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The article surveys research on mathematics and mathematically structured practices in the oral cultures of Africa south of the Sahara, "particularly studies that have appeared since the publication of C. Zaslavsky's Africa Counts in 1973, and on the integration of this ethnomathematical knowledge in contemporary African mathematics education. The topics covered encompass "counting and numeration systems, numerology, mathematical games and puzzles, geometry, graphs, Islamic influences on mathematical developments, international connections, and the history of mathematics curricula". The discussion is linked to reflections on methodology, specifically to the idea of ethnomathematics understood "a study of mathematics (and mathematics education) as embedded in their cultural context". Almost half of the article consists of a highly useful bibliography containing 341 items; quite a few of these are mimeos that have appeared recently in African universities, which the author – chairman of the African Mathematical Union, Commission on the History of Mathematics in Africa – is thus more likely to know about than anybody else.

J. Høyrup (Berlin)

Keywords: ethnomathematics; bibliography; pedagogy; Islamic influences

Classification:

*01A13 Native African mathematics