

This Week's Citation Classic®

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Cole M, Gay I, Glick J A & Sharp D W. *The cultural context of learning and thinking: an exploration in experimental anthropology.*
New York: Basic Books, 1971. 295 p.
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The Cultural Context of Learning and Thinking describes the impact of culture on the development of basic cognitive processes. Combining psychological, ethnographic, and linguistic research methods, it leads to the conclusion that cultural differences in cognition reside more in the situations to which particular cognitive processes are applied than in the existence of a process in one cultural group and its absence in another. [The *Science Citation Index*® (SCI®) and the *Social Sciences Citation Index*® (SSCI®) indicate that this book has been cited in over 365 publications.]

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The work that eventually produced *The Cultural Context of Learning and Thinking* began in 1964 when John Gay and I conducted a study of mathematical thinking among Kpelle tribal people in rural Liberia. The practical goal was to improve mathematics education.

Following the ethos of the times, we sought the source of school difficulties in the children's cultural background. We assumed that, although Kpelle children lacked particular kinds of experiences routinely encountered by other children, they were by no means lacking in experience. In fact, we explicitly began with the assumption that "we must know more about the indigenous mathematics so that we can build effective bridges to the new mathematics that we [were] trying to introduce."¹ This assumption led us into an exploration of the way in which numbers, geometrical forms, and logical operations are expressed

in the Kpelle language. We also investigated situations in which the Kpelle measure, engage in arguments, and organize situations for the education of their children.

Our second, somewhat unprofessional, assumption was that people would be skilled at tasks they had to engage in often. This statement may seem obvious or trivial, but its consequences are neither. It led us to discover that Kpelle people are masters at measuring rice. For this area of their experience, they have a highly developed vocabulary and a system of measurements that is completely consistent. When measuring distances or lengths, however, the vocabulary is less detailed, and we discovered that very often noninterchangeable units of length depended upon the kind of object or distance being measured.

Our mixture of "scientific" and "common-sense" approaches to Kpelle mathematical behavior pointed the way to our later work on culture and cognition.

The Cultural Context of Learning and Thinking was our first self-conscious attempt to apply the lessons gained from our initial research. It describes a lengthy series of experimental studies of the development of memory, classification, and problem solving, complemented by ethnographic observation and linguistic analyses. These studies demonstrated how the development and manifestation of universal cognitive processes are shaped by cultural processes. I think that this work is widely cited because it was part of a larger trend in social sciences and psychology, moving away from sweeping statements about "the human mind" to a serious consideration of the heterogeneity of mind and its dependence upon contextual circumstances. The work also posed methodological challenges that moved it into the forefront of psychological discussions in the ensuing decade.

The conclusions and methods from the research became the basis for later investigations into the cultural context of literacy² and the process of education.³

1. Gay I & Cole M. *The new mathematics and an old culture: a study of learning among the Kpelle of Liberia.* New York: Holt, Rinehart & Winston, 1967. 100 p.
2. Cole M & Scribner S. Developmental theories applied to cross-cultural cognitive research. (Adler L L, ed.) *Cross-cultural research at issue.* New York: Academic Press, 1982. p. 3-12.
3. Cole M & Traupmann K. Comparative cognitive research: learning from a learning-disabled child. (Collins W A, ed.) *Aspects of the development of competence.* Hillsdale, NJ: Lawrence Erlbaum Associates, 1981. p. 125-54.