failed to meet acceptable standards of scientific inquiry. In fact, studies that have reported differences in I.Q. scores between Asian and American children have been flawed conceptually and methodologically. Their major defects are nonequivalent tests used in the different locations and noncomparable samples of children. To determine the cognitive abilities of children in the three cultures, we needed tests that were linguistically comparable and culturally unbiased. These requirements preclude reliance on tests translated from one language to another or the evaluation of children in one country on the basis of norms obtained in another country. We assembled a team with members from each of the three cultures, and they developed ten cognitive tasks falling into traditional "verbal" and "performance" categories. The test results revealed no evidence of overall differences in the cognitive functioning of American, Chinese, and Japanese children. There was no tendency for children from any of the three cultures to achieve significantly higher average scores on all the tasks. Children in each culture had strengths and weaknesses, but by the fifth grade of elementary school, the most notable feature of children's cognitive performance was the similarity in level and variability of their scores. [Stevenson, H. W., Stigler, J. W., Lee, S. Y., Lucker, G. W., Kitamura, S., & Hsu, C. C. (1985). Cognitive performance and academic achievement of Japanese, Chinese, and American children. *Child Development*, 56, 718–734.]

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QUESTIONS

1. Why do Stigler and Stevenson begin this article by pointing out that there are no overall differences in intelligence between U.S. children and their Asian counterparts?
2. What are the differences in mathematics achievement in the United States, China, and Japan? Are these three countries close or far apart in children's mathematics scores?
3. What are three classroom practices that are different in the United States, Japan, and China, and how do these practices affect what children learn about mathematics in school?
4. Why do mathematics teachers in Japan and China strive to make their lessons coherent, and how do they accomplish this goal?
5. How is instructional time eroded in U.S. classrooms? What can be done to change this pattern?
6. How did Stigler and Stevenson ensure that the schools they observed in each country were representative of that country and that the different classrooms were comparable across the three countries? Why are both these sampling issues important to address in cross-national research on academic performance?
7. Siegler and Stevenson found that the use of real-world problems and objects helps children learn mathematics better than more abstract references. What do you think is the explanation for this difference?
8. Why is it problematic when the majority of class time is spent on individual work as opposed to group instruction or activities?
9. How do differences in cultural values in these countries lead to different interpretations and different uses of children's errors in the classroom for instructional purposes?
10. Which aspects of teacher training and support in the United States would need to be changed to enable teachers to use the techniques practiced by teachers in China and Japan?