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The statistical content of elementary school mathematics textbooks.

J. Stat. Educ. 23, No. 3, 22 p., electronic only (2015).

Summary: This study reports on the statistical content of five U.S. textbook series written for elementary students in grades 1–5. The researchers examined 17,688 pages and coded 7445 statistical tasks to determine (1) the distribution of statistical topics within textbooks, and (2) the relative emphasis on the phases of the statistical problem solving process (Formulate Questions, Collect Data, Analyze Data, and Interpret Results). Different series contained markedly different distributions of statistical content: two series located most statistical content near the end of the text, whereas two other series located statistical tasks more uniformly throughout the textbook. A large majority of statistical tasks required students to Analyze Data, with a heavy emphasis on the activities of reading displays and performing mathematical calculations.

Classification: K42 K43 K52 K53 U22 D32 U23 D33

Keywords: statistics; elementary education; primary education; textbook analyses; mathematics textbooks; content analysis; stochastics; curriculum

<http://ww2.amstat.org/publications/jse/v23n3/jones.pdf>