Written Statistics Task Guide

Guidelines for Developing, Adapting, and Analyzing Statistical Tasks

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The following questions can be used to consider the components of a statistical task as a teacher develops, adapts, and analyzes tasks that can engage students in doing statistics.

Component of a Statistics Task	Questions to Consider
Learning Goal	What learning goals does the task aim for students to accomplish? Does the task focus on answering questions that are statistical or mathematical? e.g., Does the task ask students to use computations or graphs? Are these in support of analyzing data to make a decision? or is the use of an algorithm or creation of a graph the focus?
Data	Does the task call for the use of data (either to collect or use already collected data to answer)? Does the data appear to come from a real source?
Context	Is context a salient part when solving the problem? Is the context likely to be of interest to the students engaging in the task?
Investigation Cycle	Does the task address only one phase of a statistical investigation, some phases, or all phases of the cycle?
Pose	Is the question already posed (by teachers, or curriculum developers) or do students have opportunities to pose statistical questions based on their interest?
Collect	Does the task offer opportunities for students to plan to collect data: sampling, sample size, attribute, and measurement? Do students conduct the data collection? Does the task provide a context so that students are aware of the measurement issues and how data were collected?
Analyze	Does the task offer opportunities for students to decide on the types of graphical representation and or numerical statistics to use when analyzing data? Does the task afford students to use alternative representations to shed light on the trends of data?
Interpret	Does the task ask students to incorporate context when making claims/inferences about the data? Does the task expect students' claims to account for uncertainty?

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