"Struck by Lightning" Supplementary Materials

Class Exercise About Regression to the Mean

The instructor will design some task involving tossing a small irregular object (e.g. a bottle cap) towards a larger fixed object (e.g. an oil can), while standing in some fixed distant position.

- 1. Have each student in class proceed, in turn, to attempt the task, attempting to get the small object to end up as close as possible to the larger object. Measure and record the distance of the small object from the larger object for each student.
- 2. Note which two students came the closest, and which two students were the farthest.
- 3. Again, have each student in the class proceed, in turn, to attempt the task, attempting to get the small object to end up as close as possible to the larger object. Again, measure and record the distance of the small object from the larger object for each student.
- 4. For the two students who came closest on their first attempt, were they closer or farther on their second attempt?
- **5.** For the two students who came farthest on their first attempt, were they closer or farther on their second attempt?
- **6.** How are the previous two questions related to the principle of "regression to the mean"? Discuss.