

ACTIVITY

2

ACCURACY OF OBSERVATION

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Concept

This activity provides an intriguing introduction to discussions of the accuracy and reliability of humans as observers of behavioral events and environmental characteristics.

Materials Needed

A portable tape recorder, some imagination, and decent weather.

Instructions

Introduce the activity to the students simply by explaining that you are going to test their powers of observation—their skill as observers. Tell them that you are going to ask a colleague of yours (or a particular member of the class) to lead the class on a 15- or 20-minute journey around the school grounds. Inform the students that nothing unusual has been planned, and instruct them simply to observe the normal activities and circumstances in which they find themselves. They can be told that following the walk, you will be asking them some questions about their observations.

As your colleague or class member is leading the class on the journey around the campus, follow a short distance behind—close enough to be able to observe the class and its environment but sufficiently removed to be able to speak quietly into a portable tape recorder without being heard by the class. As the walk proceeds, record approximately 50–60 questions on the tape, spontaneously drawn from your own observations of events and objects. (You may wish to prearrange the route to be followed and walk it through once by yourself to practice the questioning routine.) Each question you record should be followed immediately by the answer. Questions should be completely factual and objectively confirmable. Following are some examples:

“How many planes flew overhead as we reached the playing field?”

“In what activity was the first group of students encountered by the class engaged?”

“Where was the class when the nearby truck backfired?”

“What color was the car that passed the class at the entrance to the parking lot?”

Avoid questions with answers that are a matter of opinion (“Was it a nice day?” “Did it seem warm?”).

Upon returning to the classroom, play each recorded question in turn and stop the recorder before the correct answer is played. Have students write their answers down on paper, and then play back the correct answer. On the chalkboard, keep a record of the number of right and wrong answers to each question.

Discussion

The broad variation in student responses should provide gist for a discussion of (a) the reliability of human observations, (b) the “truth” of courtroom testimony, (c) the benefits of structuring the collection of

observations (perhaps by specifying beforehand what information is to be sought), and (d) the value and necessity of independent replication and confirmation of answers. Comparing the accuracy of the teacher's answers with that of the students' answers should provide compelling demonstration of the value of specifying the information to be sought before it is collected.

Suggested Background Readings

- Bickman, L. Observational methods. In C. Selltiz, L. S. Wrightsman, & S. W. Cook, *Research methods in social relations* (3rd ed.). New York: Holt, Rinehart & Winston, 1976.
- Hutt, S. J. & Hutt, C. *Direct observation and measurement of behavior*. Springfield, Ill.: Charles C Thomas, 1970.
- Levin, M. *Understanding psychological research*. New York: Wiley, 1979. (chap. 11)
- Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. *Unobtrusive measures: Nonreactive research in the social sciences*. Chicago: Rand McNally, 1966. (chaps. 5, 6)

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