

# PARTICIPANT OBSERVATION IN AGRICULTURAL EDUCATION RESEARCH

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Warmbrod and Phipps (1966) have noted that research in agricultural education has tended to be dependent on survey techniques involving mailed questionnaires. Studies reported in this journal reveal an interest in improving conventional data-gathering procedures in teacher education research (e.g., Bennett and Legacy, 1980; Drake and Patterson, 1978). Mannebach (1980) examined the degree to which research is addressing the concerns of teacher educators, state supervisors, and agriculture occupations teachers. The discussion about research procedures and research topics may be regarded as a positive indication of a profession attempting to respond more adequately to agricultural education program needs.

The purpose of this article is to recommend an additional approach for teacher education research. The recommendation to broaden the profession's repertoire of research practices is based on nine months of participant observation experience at an Illinois community college. The author collected and analyzed data at the college from August, 1979, to June, 1980, and presented findings on the impact of Nigerian students studying agriculture mechanics at the school in the form of a doctoral dissertation deposited at the University of Illinois at Urbana-Champaign (Peuse, 1980). Reactions from readers at the university and the community college suggest that participant observation offers the opportunity to evaluate research problems in ways unique to other approaches.

## *Definition of Participant Observation*

The participant observation approach is often associated with a case study that entails the examination of a research problem at a single site by one investigator over a considerable period of time. In recent years, however, the traditional concept of case study has been expanded to include short-term, multi-site, and multiple researcher investigations (Rist, 1980). Consequently, one can no longer be certain that a case study represents the work of a participant observer.

Participant observation may be defined as a general approach to research that requires "genuine social interaction on the scene with the subjects themselves as a part of the data-gathering process" (McCall and Simmons, 1969). The degree to which a researcher becomes enmeshed in the life and work of subjects varies (Gold, 1969), but generally it is presumed that the investigator has established a rapport and trust with subjects so as to blend into the setting and collect data without disturbing regular routines.

## *Objectives of Participant Observation*

Participant observation is usually chosen because the investigator wants to develop first-hand familiarity with a research problem or topic. Close-up observation over a period of time is deemed useful as a way to generate an understanding of daily events and perceptions of the population under investigation. In this way the research problem or topic may be re-evaluated in terms of its importance and meaning to practitioners in the field. Testimony and actions of subjects can offer insight into what issues significantly affect local agriculture program operations.

Secondly, participant observation may be used to redefine hypotheses established prior to field research and/or to create new hypotheses. As such, the approach permits one to refine hypotheses in view of concrete manifestations of the research problem.

### *The Research Problem*

The research problem may be defined in terms of a need to analyze events, to observe individual and group behaviors, and to document the concerns and opinions of the population under study. The researcher will attempt to gather data on what people do, not just what they say about the use of curriculum materials, the conduct of supervised occupational experience programs, the implementation of state standards in an agriculture mechanics program, or other topics. Testimony can be evaluated in conjunction with actual behavior and daily activities as they relate to the research topic.

### *Research Methods*

Participant observation does not preclude the use of questionnaires, formal interviews, or experimental groupings. However, the approach most often is associated with the recording of systematic observations (i.e., watching), indirect interviews (i.e., listening and casual probing), and document analysis.

These methods of collecting data typically draw on three sources of information: (1) persons, (2) settings, and (3) physical evidence such as normal temporal records (e.g., dated correspondence and memoranda) and regular tabulations (e.g., enrollment rosters and student files). In the first instance, the participant observer attempts to record the behavior and statements of several persons. In the second case, an effort is made to document behavior and statements of a person(s) in several different settings (e.g., in private, in public, in the classroom or laboratory, at SOE sites). In the final instance, documents are analyzed in order to verify testimony, piece together past and ongoing events, or gather enumerative data.

Sociologists commonly refer to this across-method and across-data source process as triangulation (Denzin, 1978). It is a procedure whereby data are collected in a variety of ways under different conditions. The approach takes seriously the axiom that multiple methods and multiple data sources must be employed in order to compensate for inherent weaknesses of any one method or data source (Webb, *et. al.*, 1966).

### *Data Analysis*

Data will appear in the terminology of the subjects and reflect the commonsense knowledge of the population under investigation. Furthermore, statements and behaviors will assume meaning as they are expressed in relationship to happenings arising in the research situation. It is the task of the investigator to describe this relationship and logically order and examine the information in light of research hypotheses.

During data analysis, the researcher may draw upon other studies in order to sort data into some framework. For example, one may discover that teacher comments about student behavior can be sorted according to Kazanas' Affective Work Competencies Inventory (1977). One may find that students have volunteered statements about the worth of SOE in accordance with Williams' surveys (1980). On the other hand, comments may indicate that previous studies have omitted important items.

By drawing on other studies during the analysis of data, the participant observer can connect findings in the local setting to the broader context of agricultural education research. In this manner one may describe events and concerns of teachers, students, parents, or others in the local situation in light of previous findings. Alternatively, findings in the local situation may expand existing understandings by suggesting new items or propositions to consider.

### *Positive Features of Participant Observation*

Participant observation allows the profession a means of evaluating the day-to-day operations of agricultural occupations programs. It permits the collection of data from the perspective of individuals as they encounter and experience program activities in an everyday context. This may lead to the discovery of new research topics or problems of importance to persons in the field who, for one reason or another, cannot or have not articulated issues and concerns that can be uncovered by a close observer. Secondly, the approach potentially can be fruitful in generating new hypotheses not otherwise entertained by teacher educators.

## Precautions Needed in Participant Observation

There are numerous traps in implementing and conducting participant observation research. The qualification of the investigator often is of central concern (Yin and Heald, 1975). Since the researcher becomes the main "instrument" of data collection, the person should have the stamina and temperament to conduct the daily processing of data. Moreover, the approach requires the investigation of a problem over a prolonged period of time, most likely at a location somewhat removed from the university community.

The approach also demands a certain amount of distancing from subjects so as not to contaminate the data and influence ongoing events. Sociologists have sufficiently advanced the methodology on both the theoretical and operational levels to guide one through participant observation, but ultimately the success of the research falls on the ability of the investigator to carve out an optimal observational role.

### Summary

This article has not reviewed the philosophical roots of participant observation (Glaser and Strauss, 1967; Campbell, 1975; Stake, 1978). Rather the intent has been to present a sense of the methodology associated with participant observation and to suggest that the approach may supplement existing research practices. This has not been a proposal to abandon the predominant research approaches in agricultural education or to field hoards of participant observers. But it may be worthwhile to encourage a few interested and capable researchers toward an alternative avenue of investigation.

### References

- Bennett, Floyd and James Legacy. "A Comparison of Data Collection Techniques for Task Analysis in Agribusiness." *The Journal of the American Association of Teacher Educators in Agriculture*, Vol. XXI, No. 2, July, 1980, pp. 29-34.
- Campbell, Donald T. "Degrees of Freedom and the Case Study." *Comparative Political Studies*, July, 1975, pp. 178-193.
- Denzin, Norman K. *The Research Act*. New York: McGraw-Hill, 1978.
- Drake, James Bob and S. Douglas Patterson. "Comparison of Teacher Reported Follow-up and a Mail Follow-up Survey of 1973-74, Secondary Agribusiness Program Completers in Alabama." *The Journal of the American Association of Teacher Educators in Agriculture*, Vol. XIX, No. 2, July, 1978, pp. 25-30.
- Glaser, Barney G. and Anselm L. Strauss. *The Discovery of Grounded Theory*. Chicago, IL: Aldine, 1967.

(Continued on page 62)