

DOCUMENT RESUME

FD 310 021

SO 020 096

AUTHOR Seward, Rudy Ray; Oakes, Ann Sutton
 TITLE Performing Research in Sociology Classes To Enhance Learning: An Evaluation.
 SPONS AGENCY North Texas State Univ., Denton.
 PUB DATE 26 Mar 88
 NOTE 26p.; Paper presented at Annual Meeting of Southwestern Sociological Association (Houston, TX, March 23-26, 1988).
 PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Computer Literacy; Data Analysis; Higher Education; *Learning Experience; Library Skills; Research Design; *Research Methodology; *Research Skills; *Social Sciences; *Sociology; *Student Research

ABSTRACT

Two problems are encountered by faculty when teaching introductory social science courses. First, most students are only passive recipients of the information made available to them; second, they seldom appreciate the relevance of this information to their own lives. The primary objective of the project described in this paper is to involve students actively in research while learning course content by having students define and apply major social concepts, use traditional and alternative data sources, and learn computer data analysis skills. Through the completion of four lessons covering the major stages of research, students learn about the source of the facts presented during the course. A field test of the lessons was carried out on one class during the two semesters in 1987. Students (N=44-51) evaluated the utility, difficulty, and contribution to learning for each lesson. The highest marks by students were given for the lessons' introduction to and experience with research skills. The majority rated the lessons' tasks as unrelated to understanding the rest of the course content; while at the same time, they said that the lessons would contribute to learning and help understanding in other courses. The lessons provided students in introductory sociology courses with insight into the research process behind the social facts, contributed to more analytical skills, and increased comprehension of the social structure's impact upon their lives. A 13-item bibliography, 4 tables, and an appendix describing the lessons and supportive materials are included. (Author/JB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED310021

5002096

PERFORMING RESEARCH IN SOCIOLOGY CLASSES TO ENHANCE LEARNING:
AN EVALUATION*

Prepared by:

Rudy Ray Seward, Ph.D.
Department of Sociology,
P. O. Box 13408,
North Texas State University,
Denton, TX 76203
1-817-565-2296

and

Ann Sutton Oakes, M.A.
Department of Sociology, NTSU; and
Brookhaven Community College,
Dallas Community College District
Dallas, Texas 75252

For presentation at annual meeting of:

SOUTHWESTERN SOCIOLOGICAL ASSOCIATION
An affiliate of Southwestern Social Science Association
Houston, Texas
March 23-26, 1988

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

RUDY RAY SEWARD

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC) "

* Supported in part by:

Undergraduate Instructional Development Grant, Summer I, 1986;
and, Department of Sociology; North Texas State University,
Denton, Texas 76203

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality

* Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

MAY BE CITED BUT NOT FOR QUOTATION
WITHOUT PERMISSION FROM AUTHORS

ABSTRACT

Two problems often are encountered by faculty when teaching introductory social science courses. First, most students are only passive recipients of the information made available to them. Second, they often fail to appreciate the relevance of this information to their own lives. The primary objective of this project is to involve students actively in research while learning a course's content. This includes defining and applying concepts, using alternative data sources, and learning computer skills. Through the completion of four lessons covering the major stages of research students learn about the source of the facts presented during the course.

A field test of the lessons was carried out on one class during the Spring and Summer semesters of 1987. Students (N=44-51) evaluated the utility, difficulty, and contribution to learning for each lesson. The highest marks by students were given for the lessons' introduction to and experience with research skills. The majority rated the lessons' tasks as unrelated to understanding the rest of the course's content; while at the same time, they said the lessons would contribute to learning and help understanding in other courses.

The lessons provide students in introductory sociology courses insight into the research process behind the social facts, contribute to more analytical skills, and increase comprehension of the social structure's impact upon their lives.

WHY?

This project responds to two problems encountered by many faculty who teach introductory social science courses. First, most students are only passive recipients of the information made available to them throughout the course. This results from the traditional lecturing approach of teaching which emphasizes understanding and memorization while failing to involve students in the active process of learning. Second, they often fail to appreciate the relevance of this information to their own lives. Students cannot be expected to perceive real-world relevance on their own without first-hand knowledge of the usefulness of sociology as a method. Frequently they leave the course without a novice's grasp of how human behavior is studied and how sociology differs from other disciplines.

Aggravating these problems is the frequent mistrust by students of research findings. Interpretations are thought to be based on the whim and bias of the researcher. The findings are considered outdated because of a failure to appreciate publication delays. This combined with a belief in rapid social change appears to make last year's facts no longer valid. Rather than recognizing trends and patterns of social behavior, students become skeptical and suspicious of valid research findings. The materials presented here represent attempts to overcome apathy and encourage creative thinking skills while providing opportunities to engage in analytical sociological research.

Some students say or imply to instructors: "Just give me

the facts." This suggests a common class scenario something like the following: The instructor lectures on the facts while students passively record them. External pressures and private concerns compete with the students' attentiveness. Many students lose concentration; therefore, no attempt is made to reflect or to challenge them. When on exams students are asked about these facts, a good grade is earned for recalling them. While this approach involves learning, it is inadequate for several reasons. First, it ignores the impact of different perspectives and approaches upon fact gathering. Different measuring instruments applied to the same phenomena results in unique findings, that is, facts. If students are not knowledgeable in the methods of doing sociology, they are unable to struggle with the data and to appreciate the products. Relying on the rote memory approach to learning both prevents the appreciation of variation in the "facts" on human interaction between individuals, groups, and cultures, as well as, changes in them over time.

For every generalization (fact) exceptions or opposing facts can be found. Students who prefer the lecture-input, student-output-by-memorization can upon further consideration challenge the facts presented in class. The problem is how to organize a course which requires students to think critically while becoming actively involved in the process of sociology. This challenge is impeded by the overemphasizes upon grades, an educational system which fails to reward critical thinking, competing priorities for students' time, encyclopedic textbooks, and the dynamics and complexities of human behavior. The difficulty is further

increased because we are studying ourselves. Ideally the results should be an appreciation and awareness of the facts gathered by social scientists (cf. Davis, 1983). This in turn should contribute to a more complete understanding of human behavior (cf. Hendrix, 1978).

OBJECTIVE

Any attempt to deal with these problems and to present alternatives to the common scenario should begin as soon as possible in a student's training. Hence, introductory sociology courses are an appropriate target for this project. The potential impact is great because many students enroll in this course each semester to either fulfill a requirement or to take it as an elective (cf. Conklin and Robinson, 1985). The course is required at many universities for a variety of majors and is often a suggested course fulfilling requirements for additional programs. At the University of North Texas this course is presently required for eighteen different majors, programs, or concentrations outside of sociology and is a suggested course fulfilling requirements for an additional fifteen programs. In 1984 this course became part of the social science option in the new College of Arts and Sciences' core curriculum (cf. North Texas State Bulletin: 1986-87 General Catalog). The enrollments in this course continue to increase primarily due to more and more students other than sociology majors taking it. At the University of North Texas over one thousand students enrolled during the 1986 Spring and Fall Semesters which represents an increase of almost 20% since 1983.

PERFORMING RESEARCH IN SOCIOLOGY / SSA 1988 / HOUSTON

The course's previous concern with initial training for sociology majors has become less and less valid. Over 90% of the students enrolled in this course are majors other than sociology. (At the same time over one third of our new majors each year result from an interest in sociology inspired by this course.) A greater emphasis is now placed upon understanding the social basis of human behavior and how this social basis is discovered. Special attention is paid to how this can be accomplished using concepts and materials relevant for a variety of academic majors. Our department has recently gained approval for changes in the course's title, from Principles of Sociology to Individuals in Society, and its catalog description reflects this emphasis. This project complements this new emphasis.

The primary objective of the project is to get students actively involved in the various steps of the research process while learning a course's content (McKeachie, 1978, p. 223). This should complement an understanding of human behavior by contributing to an appreciation of how the social basis of behavior is uncovered. The insights students gain should transfer to other social science courses, especially since all the major institutions (e.g., political and economic) in society are covered. Insights should also become relevant in the students' own lives.

To meet this objective three additional aims are attempted. One is to deal with issues of defining, measuring, and applying major social concepts (e.g., power, division of labor, or social stratification). Two is to use data provided by the students about themselves (e.g., attitudes, family, consumption, or

political activities) or gathered from existing sources (e.g., U.S. Bureau of Census, General Social Surveys, or Human Relations Area Files). Three is to set up simple procedures of data analysis requiring some basic computer skills (cf. Graves, 1987).

One approach to these objectives is to help students learn about the sources of facts. This should help them develop a perspective which responds to some of the concerns raised by the common class scenario. What students read in textbooks and hear in class are the facts according to the authors and instructor. The general source for these facts is the body of knowledge as recorded by the writers in the discipline. This amorphous collection of what is known includes literally thousands of writings including research reports, theories, and dissertations on human behavior. This body of knowledge contains a wide variety of contradictory views and findings. The facts presented in class represent a kind of consensus or the discipline's dominant view of what is presently known, even though these coexist with contradictory theories and findings. Hence, it is crucial that we encourage students not to just accept the facts, but become aware of the process which generated them. Learning about this process should contribute to the students' abilities to think critically, which is unlikely if they simply absorb facts. Critical thinking should help performance in other courses as well as in making personal decisions.

LESSONS AND INSTRUCTIONAL MATERIALS

To better understand the source of the facts presented in

class during the semester, students perform many of the activities of the research process. Below is a brief outline of the research stages used in setting up the project.

1. Definition of Research Problem or unanswered question to be studied
2. Review of Literature on Problem or what is expected (theories) and known (previous research)
3. Forming Hypotheses or putting the problem into a testable statement
4. Selection of Research Design or how to approach and gather data
5. Defining Variables and Their Measurement or selecting appropriate evidence
6. Collection of Data or Information to test hypotheses
7. Analysis of Gathered Data or organizing the evidence
8. Drawing Conclusions or summarizing the evidence and integrating them with the literature
9. Reporting Results or going public

The cyclical process of research is stressed. Hence, successful completion of a research project means getting the findings published. When this happens the research contributes to the discipline's body of knowledge. As a part of this body it is then available for others performing research to use in defining their problems and reviews of the literature. Thus the process starts all over again and is repeated.

Also emphasized is that becoming part of the body of knowledge is not easy. Lots of research findings never get published. Major academic journals and publishers only print findings after a thorough review. Close attention is paid to how and from whom the study's information was gathered, as well as, the type of analysis performed. If one or more of these is

deemed inappropriate publication is usually denied. Once a report becomes a part of the body of knowledge it may still be challenged, just as it might have challenged or refined previous ideas or facts. Direct challenges of its findings may be through replication - repeating the study to see if the results are the same - or through further questioning of the design or sample used.

These research stages and knowledge building processes provided the framework for the development of four lessons and accompanying materials. They attempt to provide a "hands on" approach to social research at an introductory level (McKeachie, 1978, p. 230). Each lesson deals primarily with one stage of research and builds upon or is an extension of the previous one. At the same time every lesson was constructed to stand alone to allow more choice and flexibility for instructors who chose to use them selectively. The lessons' tasks can be done individually or completed in small groups. Each lesson should be introduced and initiated during classtime, with additional outside classwork necessary. For a complete list of lessons and accompanying supportive materials see the Appendix.

Presented below are the goals for each lesson and the most relevant supportive materials (Appendix contains brief description).

SOCIAL BEHAVIOR AWARENESS QUESTIONS: One way to initiate the lessons is to give the students a set of twelve true and false items on behavior which have been selected to demonstrate that what is commonly believed is often challenged by research

findings. (A sample set is available upon request from the authors, as are any of the other materials presented.) These can be useful for one or more of the following reasons with the latter two being the most relevant to this project: 1. Introduce the course by covering major topics; 2. Highlight the major objectives of the course; 3. Suggest the necessity of understanding the sociological research process; or, 4. Provide concepts and topics for later use in the lessons (cf. Geertsen, 1981).

LITERATURE SEARCH AND LIBRARY USE: This first lesson has two purposes: to carry out the procedures necessary to complete a literature search on a research problem and to learn or update library skills.

DEFINITION AND MEASUREMENT OF VARIABLES: The second lesson has the following purposes: to distinguish between dictionary definitions of concepts versus the way concepts (variables) must be operationally defined to carry out research; to write these variables into a testable hypothesis identifying its essential ingredients; to appreciate the details required to write a good operational definition; and, learn to determine the measurement level for variables (cf. Poston and Sullivan, 1986).

DATA ANALYSIS THROUGH TABLE CONSTRUCTION AND INTERPRETATION: The third lesson has four purposes: to test a hypothesis through table construction and statistical analysis using computers; to learn basic computer skills in the process; to read and interpret tables; and, to assess the impact of a control variable upon the hypothesized relationship (cf. Conklin and

Robinson, 1985:48 on using computers).

DEVELOPING CONCLUSIONS: The fourth lesson has the following purposes: to differentiate between behavior practices and expectations; to determine the accuracy and completeness of information; and, to make judgements and draw conclusions.

These are the major materials developed for the project. Students completing these lessons should appreciate better how research findings are reached. Their mistrust of this process should be replaced by a discerning perspective based upon a healthy skepticism. Their ability to think critically should be enhanced. The analytical skills promoted should provide a basis for better performance in other related courses. These skills should contribute to better decision making outside the classroom whether it be in their job or as a consumer. Completing the lessons should also augment the students' sensitivity to the relationship between human behavior and the organization of society. Use of personal data about students (i.e., lessons 3 and 4) or gathered by them (i.e., lessons 1 and 2) permits an easier connection with the courses's content and stimulates a good deal of interest (cf. Hamlin and Janssen, 1987). Attitudes and behavior can be compared to those reported by classmates, in the text, and other research. These comparisons should generate discussions and insights on both substantive and methodological problems (cf. Hendrix, 1978; and Wilson, 1983).

EVALUATION AND CONCLUSIONS

The completed work and the preliminary evaluations suggest the materials are dealing with the project's primary objective of

actively involving students in the research process. Besides the sociology faculty, colleagues in the areas of political science, aging, and criminal justice, including some from outside the university, reviewed the project's materials. Their suggestions resulted in a more realistic focus for the project. Several noted the difficulty of trying to adequately cover all stages of research combined in lecture and guided activities during a single semester. The dilemma was one of structuring research activities which reflect the complexity of the process yet can be completed in a manageable amount of time. The focus resulted in the development of four lessons which incorporated the most essential aspects of research. Other comments concerning the initial proposal, introductory materials, and lessons led to questions and issues which were incorporated into the various activities as they were developed (e.g., contrasting "facts" from different sources of available data, textbooks, literature, classmates, etc.).

Goal assessment included students evaluations of the utility, difficulty, and learning contribution for each of the four lessons. A field test of the lessons was carried out on one class during each semester of the Spring and Summer in 1987. In the former the students (N=19) were enrolled in a sophomore level Honors Seminar in the Social Sciences which is team taught by a historian and sociologist. In the latter the students (N=42) were enrolled in a freshman level introductory sociology course. The students were asked to answer 19 fixed response questions on the aspects presented in the rows of Tables 1 through 4. Each

item had a four point scale (selected on purpose to avoid a middle or neutral response). Besides the three identical items on utility, difficulty, and learning contribution, specific additional items were asked on lessons 2 through 4.

In addition 15 open-ended questions asked about related aspects on each lesson, as well as, requested overall comments and suggestions for improvement. The number of students completing the evaluations varied (noted in each table) because three forms were given out separately with each being distributed close to the time the lesson(s) was due to be turned in. Only the students in attendance on that day were allowed to complete the form.

As presented in Table 1, over three-fourths of the students responded that the first lesson was useful in learning research skills (76% choose either the 1 or 2 at the useful end of the four point scale). This was the highest rating on usefulness among all four lessons. This may reflect lower division students' inexperience with using library resources. The relevance of this skill to most other areas of academic work is obvious.

TABLE ONE ABOUT HERE

Overall the learning of research skills was rated by the majority of students on the useful side of the scale for each lesson. The lowest proportion (51%), representing a fairly equally distributed dichotomous division, was for the fourth lesson. This one required the general application of most skills learned in the previous lessons; therefore, the ratings might reflect a split in the students abilities to perceive the

applicability of their learning. Overall the response on usefulness is one of the project's most positive findings. As one student wrote on the evaluation: "I learned that research is more than reading a book and writing a report. It takes detail and understanding of more than related material."

TABLE 2 THROUGH 4 SOMEWHERE, ABOUT HERE

With the exception of the first lesson the majority of students rated the lessons as being too difficult. Lessons two, with 60% of the responses on the difficult end of the scale, and three, with 66%, were rated as the most difficult by students. The percents were even higher for the introductory class as the modal responses for the honors class was on the "too easy" side of the scale (see notes below Tables 2 and 3). This was not unexpected since the concepts and skills involved, especially in lessons 2 and 3, tend to be unfamiliar and require a degree of analytical, critical thinking to perform. Activities such as operationalizing concepts, hypothesizing, and applying computer skills to data analysis, as suggested by many students questions during class and their written responses to open-ended questions were something totally new. These activities were specifically designed to challenge the students skills, therefore, the responses reflect the degree of difficulty encountered. One student wrote: "I feel that the only thing I gained from this research project is frustration. If you're never worked on computers before it was extremely hard." One positive response suggested that lesson 4 did: "Enhance understanding of how common beliefs do not always relate to actual facts." On the

same lesson another student began to realize how important it is to be aware of: "all the variables that can affect the outcome."

The most disappointing (and cause for concern) of the student responses was the overall rating for each lesson on the dimension of their contribution to understanding the course's content. Over 60% of their responses (76% for lesson 4) were at the unrelated end of the scale. One student wrote of lesson 2 that it was an: "unnecessary assignment." Another on lesson 3 wrote: "To me it was unrelated to the course." On the other hand, some students wrote very positive comments. One said lesson 2 provided an: "Reinforcement of past class learning." Another said they learned to: "To understand questions. Then think about the answer." One student suggested a major shift in perspective by stating: "New important concept learned was to rely on the scientific data (rather than common sense." Also the honors students modal response was on the "contributed" side of the scale. Further analysis is required to understand better the meaning of these ratings. Is the measuring instrument valid or is it that students are unable transfer the applicability of the new skills?

At the same time the majority of students on lesson 2 indicated that this knowledge would be applicabile to other courses (77%), help at least some in the learning process (84%), and at work (61%). On lesson 4 , 89% of the students thought the lesson would make at least some contribution to other studies and work. When asked to provide personal comments on the activities applications to other course work, favorable reponses reflected

an awareness of the practical application as well. One student stated it will help in: "other undergraduate courses; (and) analysis of problems at work." One student specifically mentioned a course on: "Business law; (and) day to day interaction with low-level (?) participants." Several mentioned a better understanding of people and society and improvements in other social science courses. One student provided a back-handed compliment saying the lessons were useful: "Only if they (students) are interested in learning about people and if they have an interest in the subject." One: "Found it interesting (only) after completion! Was surprised to find how much it related back to the course."

The most negative comments were made about lesson 3. As one student stated, it was the: "Worst one that we had." Another questioned its relevancy and said: "I learned something about computers but I had rather have learned sociology." One novice's response was: "I had a great deal of difficulty understanding the computer assignment, but I have never used one before." Negative reactions reflected two concerns: (1) 13% reported frustration based on previous inexperience with computers; (2) Amount of time expended to complete the computer application of the data analysis. Almost 60% of the students reported that they spent more than 4 hours on this assignment. As one student stated there: "was a lot of extra labtime that did not receive lab credit." Also unrealistically, in this day and age, the majority of students (55%) said they would avoid using the computer again.

PERFORMING RESEARCH IN SOCIOLOGY / SSA 1988 / HOUSTON

Finally some comments seemed to sum up the positive aspects of the project. As one said they learned they: "Had to dig deeper for information." Or the one that said: "I learned that research is more than reading a book and writing a report. It takes detail and understanding of more than related materials." Another said: "They did help in that I had to really think about and organize my answers." Finally the student, who every teacher dreams of having, said: "They were valuable to me because they provided me with the rare opportunity to do simple, able-to-be-located research that is satisfying to complete and understand."

This project succeeded in achieving student self-involvement in the learning process because goals were specifically built into the course objective, and students completed the lessons. The role of the instructor was transformed from lecturer, or provider of "facts" to resource person and guide in a process challenging students' to succeed in developing research skills, critical thinking, and relevance of concepts to their own lives.

This project augments the instructional aids and teaching skills of faculty handling introductory sociology and other social science courses. The lessons have been specifically designed to provide students with insight into the research process which produce the social facts. While the lessons should build and develop students analytical skills, they should also expand awareness of the social organizational impact upon their lives. The potential results therefore, are not restricted to one introductory sociology course but may be generalized to all areas of learning.

PERFORMING RESEARCH IN SOCIOLOGY / SSA 1988 / HOUSTON

TABLE 1: PERCENT DISTRIBUTION OF STUDENTS' EVALUATION OF LESSON ONE ON LITERATURE SEARCH AND LIBRARY USE FOR 1987

Aspect	Values				Total	Missing
	1	2	3	4		
	Useful		Not Useful			
Learning research skills	18	58	22	2	100%	0
	Much Too		Too Easy			
Difficulty	-	33	67	-	100%	0
	Contributed		Unrelated			
Understanding course content	6	33	47	14	100%	0

Source: Based upon responses from 51 students enrolled either in a Honors Seminar in the Social Sciences (N=15) during the Spring semester or in Individuals in Society (N=36) during the Summer 1 semester at North Texas State University.

Notes: The lesson used in the Summer semester had the same basic content and intent as the one used earlier but was edited based upon comments received during the Spring semester.

Missing cases are due to the students either leaving a question blank or using a code not on the scale.

PERFORMING RESEARCH IN SOCIOLOGY / SSA 1988 / HOUSTON

TABLE 2: PERCENT DISTRIBUTION OF STUDENTS' EVALUATION OF LESSON TWO ON DEFINITION AND MEASUREMENT OF VARIABLES FOR 1987

Aspect	Values				Total	Missing
	1	2	3	4		
	Useful		Not Useful			
Learning research skills	15	47	32	6	100%	1
	Much Too		Too Easy			
Difficulty	13	47	40	—	100%	1
	Contributed		Unrelated			
Understanding course content	9	26	48	17	100%	2
	Applicability of knowledge gained to:					
	No Help	Sociology Only	Social Science	All		
Other courses	23	28	23	26	100%	2
	No Help		Great Deal			
Learning process	16	38	40	6	100%	1
Work	39	39	12	10	100%	1

Source: Based upon responses from 48 students enrolled either in a Honors Seminar in the Social Sciences (N=15) during the Spring semester or in Individuals in Society (N=33) during the Summer I semester at North Texas State University for the first three aspects. The last three aspects were only asked of the latter class (N=33).

Notes: (See Table 1)

For difficulty (row 2) and understanding (row 3) the modal response for the honors course were values 3 and 2 respectively.

PERFORMING RESEARCH IN SOCIOLOGY / SSA 1988 / HOUSTON

TABLE 3: PERCENT DISTRIBUTION OF STUDENTS' EVALUATION OF LESSON THREE ON DATA ANALYSIS THROUGH TABLE CONSTRUCTION AND INTERPRETATION FOR 1987

Aspect	Values				Total	Missing
	1	2	3	4		
	Useful		Not Useful			
Learning research skills	13	39	28	20	100%	2
	Much Too		Too Easy			
Difficulty	13	53	30	4	100%	2
	Contributed		Unrelated			
Understanding course content	2	32	33	33	100%	3
	More Likely		Avoid			
Future computer use	19	26	32	23	100%	2
	None		Programmer			
Computer experience	13	35	42	10	100%	2
	One Hour		Over 4 Hours			
Time spent	3	23	16	58	100%	2

Source: Based upon responses from 48 students enrolled either in a Honors Seminar in the Social Sciences (N=15) during the Spring semester or in Individuals in Society (N=33) during the Summer 1 semester at North Texas State University for the first three aspects. The last three aspects were only asked of the latter class (N=33).

Notes: (See Table 1)

For difficulty (row 2) and understanding (row 3) the modal response for the honors course were 3 and 2 & 3 respectively.

PERFORMING RESEARCH IN SOCIOLOGY / SSA 1988 / HOUSTON

TABLE 4: PERCENT DISTRIBUTION OF STUDENTS' EVALUATION OF LESSON FOUR ON DEVELOPING CONCLUSIONS FOR 1987

Aspect	Values				Total	Missing
	1	2	3	4		
	Useful		Not Useful			
Learning research skills	10	41	37	12	100%	3
	Much	Too		Too Easy		
Difficulty	7	44	44	5	100%	3
	Contributed		Unrelated			
Understanding course content	2	22	56	20	100%	3
	None		Great Deal			
Contribution to other studies and work	11	53	36	—	100%	1

Source: Based upon responses from 44 students enrolled either in a Honors Seminar in the Social Sciences (N=15) during the Spring semester or in Individuals in Society (N=29) during the Summer I semester at North Texas State University for the first three aspects. The last aspect was only asked of the latter class (N=29).

Notes: (See Table 1)

For learning research skills (row 1) the modal response was 3 for the honors course.

REFERENCES

- Conklin, George H. and Isaac A. Robinson. 1985. "Introductory Sociology's Role as a Service Course." Teaching Sociology 13:46-60.
- Davis, James A. 1983. "Five Well-Established Research Results: Probably True, Teachable in Introductory Sociology, and Worth Teaching." Teaching Sociology 10:186-209.
- Geertsen, H. Reed. 1981. American Sociological Association's Teaching Services Seminar. February 12-14. Denton, TX: Texas Woman's University.
- Graves, William H. 1987. "CAI: Computer-Assisted Involvement." Academic Computing 1:1-9,57-60.
- Hamlin, John and Susan Janssen. 1987. "Active Learning in Large Introductory Sociology Courses." Teaching Sociology 15:45-54.
- Hendrix, Lewellyn. 1978. "Studying Ourselves: The Questionnaire as a Teaching Tool." The Family Coordinator January:47-54.
- McKeachie, Wilbert J. 1978. Teaching Tips: A Guidebook for the Beginning College Teacher. Seventh Edition. Lexington, MA: D. C. Heath.
- North Texas State University Bulletin: 1986-87 General Catalog. Number 86-52. Denton, TX: Office of Public Affairs and Information Services.
- Poston, Dudley L. and Teresa A. Sullivan. 1986. "Developing Demographic Literacy and Evaluation Skills: Techniques for the Introductory Demography Course." Teaching Sociology 14:83-91.
- Robertson, Ian. 1983. Sociology. Second Edition. New York, NY: Worth.
- Skipper, James K. and Frank J. Kohout. 1968. The American Sociologist. 3:37-38.
- Wilson, Everett K. 1983. "Standards for Judging the Adequacy of Sociology I." Teaching Sociology 10:210-218.

APPENDIX

The primary task of the project involved gathering and organizing materials for four separate lessons, dealing with different aspects of the research process. Also a series of supportive materials for these lessons was prepared. Complete drafts are available for distribution for the following lessons and supportive materials:

1. Introduction to Instructors,
2. Introduction to Students,
3. Social Behavior Awareness Questions for Students.

It is best to introduce these items during the first day or week in class. They frequently generate a good deal of lively discussion which results in many reference points for the rest of the semester and opportunities to make the points necessary to set up the later lessons (McKeachie, 1978, p. 15).

In the discussion of the instructor's answers versus those from the class (differences usually occur on about one half of the items) the following points may be relevant. 1. Differences on answers among students indicates a lack of consensus on what is sometimes considered "common knowledge" or "common sense," plus often reflects variation in students' backgrounds. Thus the need for a systematic way to establish the facts through research can be emphasized. 2. Some of the differences between the students' and the instructor's answers show that common knowledge, even when agreement is almost complete, is not always borne out by the findings from scientific research. Hence, the need to question the "of course" statements or "obvious" facts through research. 3. Some disagreements arise because students fail to distinguish between expectations (ideal culture) and actual behavior (real culture). Research is necessary on both attitudes and behavior. 4. Some disagreements reflect trends that get exaggerated in the media which as a consequence incorrectly become part of "common knowledge." The goals of social research are different from those of journalism (Robertson, 1983, p. 8).

4. Instructor's Discussion Guide for Social Behavior Awareness Questions,
5. Literature Search and Library Use (Lesson #1),

Students are asked to do the following: Identify a research problem on which to search for references (the social behavior awareness questions can be a source for topics); summarize the textbook material and class discussion on the problem; report on a discussion of the problem in settings outside the classroom (e.g., acquaintances at dorm or with family, close friends, etc); at the library find materials providing evidence on the problem

in different types of secondary sources (indexes, abstracts, and computer catalog search); for some original articles or books located, identify their major hypothesis, variables including operational definitions, data collection technique, and findings (preparation for and performance of this lesson, especially this section provides an overview of the research process); write an integrated review of the evidence in the primary sources; and, finally, contrast the textbook's and classmates' discussion to what was found in the primary sources and explain any differences.

6. Definition and Measurement of Variables (#2),

Students are asked to do the following: write a hypothesis for the research problem from lesson 1 (or other source) identifying its independent and dependent variable and the direction of the relationship; summarize what the textbook says about this relationship; for each variable provide both a general definition for the concept upon which it is based and an operational definition spelling out its measurement procedure; provide additional operational definitions for the variables using completely different measurement procedures and evaluate which of the alternative operational definitions better reflects the general meaning of the concept, has the most complete set of and mutually exclusive values, and can be more easily applied; determine the level of measurement for each variable; contrast and evaluate the student's operational definitions compared with those found in the literature; propose operational definitions at different levels of measurement; and, finally discuss how measuring a variable using different techniques affects findings.

7. Data Analysis through Table Construction and Interpretation (#3),

Students must complete the following: formulate a hypothesis identifying the independent and dependent variables, their measurement level, direction of the relationship, and supporting evidence, [one version asks student to complete a questionnaire on their family activities and attitudes based upon Hendrix (1978, p. 48) to provide a data set]; create a data file on disk via a terminal through the mainframe computer; construct from this file a table, using a statistical software package (e.g., SPSSX) containing the joint distribution between the hypothesis' variables; interpret the table on the printout using both the cell percents and a statistical measure of association; explain the relationship, or lack of one, found; for a control variable generate additional tables for each of its values and assess how this variable affects the original relationship; and, finally, construct a table using the control variables as an independent variable and compare the original hypothesized relationship to this one.

8. Social Class and Surname: Student Survey,
9. Students' Ranking of Surnames by Social Class,
10. Developing Conclusions (#4), and

Students are given a short questionnaire asking them to suppose six social classes exist in the United States and then rank six family names into these classes (Skipper and Kohout, 1968). After doing this they are asked to indicate their feelings on the possibility of determining a family's social class by knowledge of surname. From the students' data a table is put together presenting the cross distribution for rankings of the six family surnames by their estimated class status. This is returned to the students along with a table of results from the same survey taken in the 1960s (p. 38). Below each table the results from the opinion question on the possibility of ascertaining a family's social class by knowledge of surname is reported. The tables present a consistent pattern between each surname and a particular class ranking in contrast to the vast majority of students disagreeing with the possibility of there being an association.

Using this data students are asked to do the following: describe the relationship between the two variables for each table; describe the characteristics of the sample respondents for each table; explore the impact of differences in time and geographical location for each sample; discuss how representative these samples are of the entire U.S. population and how this affects the ability to generalize these findings beyond the samples; explain the contradiction between the relationship found between surname and social class, and the strongly expressed opinions that a family's social class could not be determined by their surname; explore ways where family name might affect interaction with a person or affect directly or indirectly social behavior; discuss what concept surname really reflects and the validity of it as an operational definition; integrate responses into a reasonable conclusion on the role of family name in determining behavior, especially social class, and the basis of class.

11. An Evaluation of the Four Lessons on Research.

Each lesson has a generic version available for introduction to instructors. These versions contain its purposes, a wide range of possible questions (including some variations on the same question), and suggestions and resources intended to assist the instructor. An interested instructor can request a custom made version for their class using only selected questions and adding their own if desired. As a result different versions exist for a couple of the lessons (copies are available upon request).