# Learning to Interview in the Social Sciences

Kathryn Roulston Kathleen deMarrais Jamie B. Lewis University of Georgia

A large proportion of social science investigations rely on interview data, yet few researchers received formal training in interviewing. The authors investigated how novice researchers developed their interview skills, reporting on postgraduate students' experiences and reflections during an intensive 15-day interview course. Data analyzed for the article include audiotapes and transcripts of in-depth interviews and students' written critiques and journal reflections. Challenges faced by novice interviewers conducting in-depth interviews included unexpected participant behaviors, dealing with the consequences of the interviewers' own actions and subjectivities, constructing and delivering questions, and handling sensitive research topics. The authors also discuss the transcription of audio-recorded talk and include their own and students' reflections concerning the learning and teaching of interviewing. Finally, the authors provide recommendations for teaching interview skills for the purpose of doing social science research. This study informs teachers of qualitative research and researchers who seek to develop their interview skills.

Keywords: teaching qualitative research; qualitative interviewing

One thing I know I have learned is that interviewing is much more difficult than I ever imagined it would be. In that way, it is kind of like teaching. Most everybody is taught, therefore, most people think they can teach. Interviewing appears to be asking someone questions, and who has never done that? What you do not see about teaching and interviewing from a surface observation is the utter complexity of the preparation and delivery process. It is only when you try to do either one that you realize there is much more to it than meets the eye. (Claire)<sup>1</sup>

Authors' Note: We are grateful to the students in this course for their risk taking in agreeing to participate in a project such as this. Their openness and self-disclosure regarding their learning processes have enabled us—and we hope others—to learn a good deal.

Qualitative Inquiry, Volume 9 Number 4, 2003 643-668 DOI: 10.1177/1077800403252736 © 2003 Sage Publications

# INTRODUCTION

Claire's reflection on the complexity of the interview process provides some insight into an unavoidable and ubiquitous feature of doing interviews: That is, one can never be sure what will occur. Sacks (1992) commented that

one cannot invent new sequences of conversation and feel comfortable about them. You may be able to take "a question and an answer," but if we have to extend it very far, then the issue of whether somebody would really say that, after, say the fifth utterance, is one which we could not confidently argue. One doesn't have a strong intuition for sequencing in conversation. (p. 5)

Similarly, interview data cannot be "invented" prior to the interview itself. As interviewers, we might anticipate a certain kind of narrative or description from our respondents, but we can never be sure what will happen. This is, no doubt, a source of anxiety for some researchers, excitement and anticipation for others. For novice researchers, learning about interviewing and doing interviews are different tasks. In this article we explore some aspects of what novice researchers did in interview settings as they developed this research skill. Findings concerning students' reflections on their learning in a 15-day intensive interview course are discussed, and we conclude by making some observations about how one might go about teaching interview skills to novice researchers. We posed the following research questions:

Research Question 1: What are students' responses to a series of tasks in interviewing skills?

Research Question 2: What difficulties do students encounter in learning to become skilled interviewers?

Research Question 3: How might interview skills for the purpose of social science research be effectively taught in university settings?

### LITERATURE REVIEW

As a research method, interviewing has been approached from a multitude of perspectives. It is beyond the scope of the present article to provide an in-depth account of literature concerning interviewing and debates concerning the use of interviews as a method of data generation. Our interest here is to investigate the teaching and learning of interview skills for the purposes of research. Here, we refer the reader to more in-depth treatments of different types of interviews as discussed by various authors and qualitative methodologists. These include general introductions to qualitative interviewing (Kvale, 1996; Seidman, 1991; Weiss, 1994) and texts devoted to explicating specific interview genres—for example, focus group interviews (Greenbaum, 1993; Krueger & Casey, 2000; Morgan & Krueger, 1998), the

"long interview" (McCracken, 1988), oral history interviews (Dunaway & Baum, 1996), and the "ethnographic interview" (Spradley, 1979).

Potential problems of interviewing as a research strategy and approaches to analysis of data generated have likewise been discussed and critiqued at length from various theoretical perspectives. (See for example feminist, postmodern, and sociolinguistic treatments of the interview as a research method in Briggs, 1986; Graham, 1983; Oakley, 1981; Reinharz, 1992; Scheurich, 1995; conversation analytic and ethnomethodological perspectives to data analysis in Baker, 1997, 2002; Rapley, 2001; Rapley & Antaki, 1998; Roulston, 2001; Roulston, Baker, & Liljestrom, 2001; and narrative approaches to interviews and data analysis in Mishler, 1986; Riessman, 1993, 2002.) The recently published *Handbook of Interview Research: Context and Method* (Gubrium & Holstein, 2002) provides an excellent starting point for any researcher contemplating using interviews as a method of data generation.

In this article, we follow Holstein and Gubrium's (1995) injunction to investigate both the "hows" and "whats" of the interview process. Holstein and Gubrium argued for the notion of the "active interview," emphasizing "that all interviews are reality-constructing, meaning-making occasions, whether recognized or not" (p. 4). We too see the interview as a site in which interviewers and interviewees co-construct data for research projects rather than as a setting that provides authentic and direct contact with interviewees' realities (Atkinson & Silverman, 1997; Silverman, 1997). In this article we specifically investigate the process of learning and teaching interview skills in a university setting.

Although there is some literature available that investigates how interviewing skills are taught, these studies are primarily found within the field of medicine and report on students' and doctors' perceptions and evaluations of courses of instruction devoted to developing interviewing and consultation skills (Lynch & Tamurrino, 1992; Mannion, Browne, & Fahy, 1999; Nestel, 2001; Usherwood, 1993). Other studies provide descriptions of course structure and activities for students learning how to conduct and participate in job interviews (Hindle, 2000; Rohn & Lee, 2001; Walker, 1993). However, the consultation interview and the job interview are different in purpose to the social science research interview. Although some guidance might be gleaned from a review of this literature into possible ways of facilitating interview experiences (mock interviews, feedback on audio- and videotaped interviews, authentic interviews, etc.) for students, these studies provide little insight into how novice interviewers develop their skills in interviewing or how interviewing as a tool for the generation of research data might be effectively taught.

Brieschke (1997) is one teacher of qualitative research methods who did report on an interview course. This author outlined an interview project undertaken by graduate students as part of an introductory seminar aimed at providing an overview of the "processes of developing a research question and collecting, interpreting, analyzing, and presenting qualitative data" (p. 86). Focusing on the issue of "race," Brieschke reported how students in the class constructed an interview protocol, conducted interviews, and analyzed data. Class members used a standardized interview protocol for their first interview before attempting an unstructured, open-ended interview. Although some detail is included in relation to how the activity was conceived and carried out, Brieschke pursued the implications of students' responses to their investigation of race rather than issues relating to the students' processes in learning to interview. In contrast, we address the teaching and learning of interview skills specifically.

The purpose of this qualitative case study is to examine and describe novice interviewers' experiences of learning to conduct interviews for the purpose of social science research projects. Because it has been estimated that 90% of all social science investigations rely on interview data (Briggs, 1986), we believe that it is important to investigate further how researchers learn to conduct interviewing for the purpose of data generation. We begin by describing the design of the study, data collection, and analysis before presenting findings.

#### **CONTEXT**

The data used in this article are derived from a study of a qualitative interview course taken by 16 doctoral students at a college of education at a large Research I university in the United States. The program in qualitative inquiry at this institution provides extensive training to large numbers of students undertaking research in education and other disciplinary fields. The interview course was an elective, with two prerequisites, including an introduction to qualitative research heavily steeped in theoretical and philosophical underpinnings of qualitative research and a course in qualitative research design. All of the students were aiming toward conducting individual research projects in the social sciences as part of their postgraduate studies, and a large proportion of the class were undertaking the requirements of a certificate in qualitative research.<sup>2</sup> In this intensive Maymester course in which the class met daily for 15 successive days, students engaged in discussions of issues relating to interviews as a research method, analyzed and discussed model interviews, and conducted different types of interviews, including in-depth, phenomenological, focus group, and oral history interviews. Students investigated the subjectivities they brought to their individual research topics via the process of bracketing interviews described by phenomenologically informed researchers (Pollio, Henley, & Thompson, 1997) and reflected through journal writing over the period of the course on both the process of interviewing and the development of their skills. Because of the short time period in which this course was conducted, students often practiced their interviews with peers. For example, the focus groups were conducted within the class. The participants of the in-depth interviews, in contrast, included both members of the class (in cases where a participant could be found who "matched" the research interest of the researcher) and others who were participating in studies conducted as independent projects for which institutional review board approval had been gained.

The first and second authors teach qualitative research methods courses (both theory and method) within the college and collaboratively plan the three core courses in the program that they teach (qualitative research traditions, designing qualitative research, and qualitative data analysis). Each also teaches optional courses in specialized areas of qualitative research. The second author taught the interview course. Although she has taught interviewing for many years as a core component of other courses, this was the first time to have undertaken a specialized course on the topic. The first author gave one guest presentation concerning transcription practice during the course and was otherwise uninvolved in either planning or teaching the course. The third author was completing her Ph.D. at the time of the study, was not a member of the class, and had undertaken all coursework requirements of the qualitative certificate.

# RESEARCH DESIGN AND METHODS

At the beginning of the course, students were invited to participate in a study investigating the development of their interview skills across the course. All 16 students gave their informed consent to participate in the project and to provide course materials for analysis. These included reflective journals, transcripts and critiques, audiotapes, and videotapes. Several students exercised their right of veto over certain sections of data, indicating that some items were not to be used by the researchers for conference presentations (e.g., videotapes), and several chose not to make available copies of some items (audiotapes and/or transcripts and journals) to us.

It is beyond the scope of a single article to report our findings from our analyses of all data. Here we report our analysis of the in-depth interviews conducted by 12 students. Interviews from 4 of the 16 students were excluded because we were missing either the audiotape or the transcript, or in negotiation with the instructor, the student had conducted a different kind of interview (e.g., a second oral history rather than an in-depth interview).

Beginning by subdividing the data set, we each took responsibility for data from 4 participants. We listened to the audiotapes of the interviews and repeatedly read through the transcripts, student critiques, and journal reflections on each interview. We conducted an inductive, thematic analysis of stu-

dents' critiques and journals to identify emergent themes. These included events and experiences that students defined as problematic during interviews, what students said they learned about interviewing from engaging in practice, how students evaluated their performance in the interviews, and what aspects of the interview and/or interview process stood out for them. We also investigated students' observations of their practice in their critiques and reflective journals by comparing these with our own examination of the interview transcriptions and audiotapes.

In the article we discuss findings in three thematic categories: (a) challenges of the interview process, (b) transcription issues, and (c) reflections on learning and teaching interviewing. We follow by summarizing and discussing these findings and conclude the article by presenting some observations for consideration by those who teach interviewing skills for the purposes of research.

#### **FINDINGS**

# **Challenges of the Interviewing Process**

From our analysis of the students' reflective statements and a careful reading of the interview transcripts, we found that these novice interviewers were challenged in a variety of ways within the research context. In the majority of interviews analyzed, the definition of *interview* as "a meeting at which information is obtained" (Merriam-Webster, 2001) seems somewhat inadequate. Much information may have been obtained, but sometimes it was not necessarily related to the researcher's topic. Unanticipated and disconcerting events occurred prior to and during interviews. If information for a research purpose was the goal for these novice interviewers, quite often it was obtained via a series of "challenges" experienced during the interview process. These challenges included (a) unexpected participant behaviors, (b) consequences of the researchers' own actions and subjectivities, (c) phrasing and negotiating questions, and (d) dealing with sensitive issues. Next, we discuss further each of these issues.

### **Unexpected Participant Behaviors**

In several cases, the novice interviewers experienced situations they had not anticipated in their interview planning. These usually occurred at the beginning of the interview and took the form of the participant being late to the meeting, eating during the interview, having to interview in a noisy room (complete with children watching cartoons on television), and in one case, a

dog barking in the background. Diana described her reaction to just such a setting:

There were three children in the room. One boy looked to be about 4 and was laying and watching cartoons. A little girl was in a playpen and reached up to be picked up as I came in. Jim [participant's husband] distracted her with a toy. There was a younger baby in a cradle, still asleep. About 8:40, [my participant] drove up. She came in and started talking to me about the problem with teenagers oversleeping. There was no other space to go to in the house and I asked [my participant] if she would like to come to my house for the interview. She said no and assured me that everything would be fine. She said the babies were no problem and that we would be finished before I knew it. That was just what I feared most. The delay combined with the room full of people and cartoons made me nervous and I really just wanted to go find someone else. I felt shaken and disorganized. I thought it would be rude and inconsiderate to refuse to do the interview since she made the time and obviously thought the environment was adequate. I asked her if it was going to be appropriate to discuss sex in front of the 4-year-old. She was fine with that.

In her written reflections, Diana evaluated her interview as one that did not yield substantive information about her research question, and in fact, of the individual interviews analyzed for this article, Diana's was completed in the shortest period of time. She attributed her inability to get to the "heart of the matter" (Geertz cited by Wolcott 1999, p. 87) to the distractions she experienced in the interview context.

On the surface, this interview seems like a pretty superficial account of [my participant's] experiences growing up without much information about sex. Then she tried to change that experience for her daughters. I don't think I was able to dismiss the distractions and be present in the interview. I missed the opportunity, if it existed, to get to the substance of how [my participant] educated her daughters.

Diana was surprised by her responses to the distractions of her setting and the effect it had on the generation of data for her study. She commented in her journal:

I am surprised that I get so rattled if my "process" is interrupted—the individual interview. I am surprised that the skills I thought I had as an interviewer were my imaginary friends. I am surprised that I can prepare for an interview with really good intentions of not falling into bad habits, and then falling into bad habits. I am surprised that I need to practice as an interviewer before I do data collection.

Another student interviewer, Leah, described similar unanticipated behavior from her respondent:

On the morning of our scheduled interview, [my participant] showed up half an hour late for our interview. Since she had another appointment on the same day, I only had about an hour to talk to her. During the interview, [the participant]

was chewing her bagels for breakfast. I didn't mind that at all. On the contrary, I appreciate her time and efforts despite her tight class schedule.

Although Leah reports that she "didn't mind" that the participant was late and eating breakfast during the interview, it was an unanticipated complexity she had not considered in her planning for the session.

# Consequences of the Researcher's Own Actions and Subjectivities

Within this subtheme we include students' descriptions of what they noticed concerning their actions and observations about their ability as interviewers to listen carefully. A number of participants noted how their instructions (or lack thereof) created problems later in the interview. For example, Jolene commented,

I should have informed the participant at the beginning of the interview that I would be taking notes. When she saw me taking notes (to remember those future probes) she stopped talking, and I had to explain then what I was writing.

Jolene also recognized how her own beliefs and subjectivities impacted the formulation of questions.

Some of my subjectivities were evident in my area of questioning.... Now I have to confess: there was one occasion when I was really trying to lead the participant to give a specific answer. When I asked the participant to describe her curriculum in two or three words, I was trying to get her to say "survival skills curriculum." I have heard her husband [her coteacher] describe the curriculum in these terms before, and I wanted to go into that with her because the "survival skills curriculum" is an issue for me. Unfortunately (or fortunately?), the participant did not take my lead.

Leah also described how her assumptions were evident in her interview:

Right at the beginning of the interview, I deliberately tried to reduce the effects of my assumptions by asking her a simple, close-ended question, hoping that question can help set any participant at ease and prepare [her], in this case, to talk further on my topic later. In fact my assumptions still got the better of me. When she told me that she used to teach in two different schools, I didn't probe on that response. I went straight ahead toward the first question on my guide. I should have asked her to tell me about those two schools where she once taught before I inquired about her decision to become a social studies teacher.

Through investigating their interview experiences and resulting transcripts, these students both demonstrate their ability to see how their assumptions as researchers contribute to the ongoing flow of talk and the types of responses made by participants. Similarly, in class discussions and readings that interrogated the complexity of the interview as a site for data

generation, a number of students found that their prior understandings of interviewing were disrupted. For example, Jolene wrote in her journal:

In this class, through our readings and our interviewing assignments, I have become conscious of the interview as the site for the joint construction of meaning between the interviewer and the participant. Before this class, I didn't really think about the interview process. I just thought, "I ask. The participant answers," and I didn't consider how the "ask" and the "answer" influence each other and blend together to become "the interview."

Students within the course had been advised to listen carefully to their respondents, limit their contributions to the interaction, and aim for an 80/20 or 90/10 ratio in their interviews (that is, 80% to 90% respondent/10% to 20% researcher talk). What happened in actuality? Overall, students evaluated their listening skills highly. This occurred irrespective of how much talk they contributed to the interview—this varied from 9% to 41% of lines of talk across transcripts analyzed. (See Table 1 for an overview of researcher/respondent contribution to interview talk as transcribed.)

In cases where participants rated their listening skills highly yet also contributed substantially to their interview talk, this was rationalized through the intent to "build rapport" with the respondent. For example, Heather (who contributed 33% of the lines in her transcription) commented:

I was a good listener. I enjoyed listening to what [my participant] had to say. I tried to take her comments and build upon them to find out more about her school experiences. She shared many things that did not have any connection to school and I listened without interrupting.

Heather justified her contribution to the talk via theoretical means:

I enjoyed the time I spent talking to [my participant], it was very enjoyable and interesting. There were a few things that I felt did go well. It was very conversational. The interview moved smoothly where [my participant] shared and I responded without interrupting but with comments and probing that provided a smooth flow. Black feminist thought supports the idea of dialogue and sharing that helps to establish opportunities for sharing meaningful experiences. It was a comfortable conversation of sharing back and forth.

Yet another respondent, Jolene, recognized her need to talk less when conducting research interviews. Although she contributed 13% of the lines in her transcript and few "continuers" (e.g., yeah, um) and comments, she nevertheless stated in her reflections: "I need to learn just to bite my tongue and stop talking after I've asked the open-ended question."

This observation is somewhat at odds with Jolene's self-evaluation elsewhere as a good listener. However, here, Jolene also refers to the "noise" in her head during the interview process and her growth over the duration of the course in "quieting" the distractions of self-talk.

TABLE 1: Researcher/Respondent Contributions to Interview as Displayed in Interview Transcript by Number of Lines

Name	Lines Taken in Explanation of IRB Protocol (Both Speakers)	Researcher's Utterances in Number of Lines and Percentage of Lines of Interview Talk (Excluding IRB Protocol,	Percentage of Lines of Interview Talk (Excluding	Transcript Lines Pertaining to Substance of Interview
Participant 1	30	70 13%	480 87%	550
Participant 2	Not included	457 41%	656 59%	1,113
Participant 3	21	64 9%	613 91%	677
Participant 4	20	59 21.5%	215 78.5%	274
Participant 5	Not included	56 10%	508 90%	564
Participant 7	15	64 13%	446 87%	510
Participant 8	16	138 13%	922 87%	1,060
Participant 11	29	64 9%	631 91%	695
Participant 12	12	53 12%	396 88%	449
Participant 14	26	98 20%	398 80%	496
Participant 15				
(plus four				
other				
speakers)	Not included	94 14%	568 86%	662
Participant 16	23	183 33%	369 67%	552

NOTE: IRB = institutional review board.

As I noted in the beginning of the course, the "listening" aspect of interviewing comes easy for me. I'm good at keeping my mouth shut and letting the participant talk. That's probably the "introvert" in me. However, I feel I have developed in my ability to concentrate during the interview on what the participant is saying. Previously, my mouth may have been "quiet" but I was "noisy" in my head. Now I am able to focus more intently on what the participant is telling me. I feel more "present" during my interviews.

Evidently these students reflected in some depth on the readings and class discussions and continually linked topics discussed to their own experiences of interviewing. What we find interesting in students' reflections and critiques is their different views and assumptions about the kinds of interviews they aim to conduct. For example, Sharon spoke of the interview as conversation, a position adopted by a number of students in the class: "I think that

when the participant is able to see the interview as a conversation, they will begin to relax and share and not worry about only giving information."

Others took a more formal view of the interview. For example, Noelene wrote about her experience of the in-depth interview:

Because I have visited this participant's class and I am myself an adult ESL teacher, I had to be very conscious of not agreeing, disagreeing, sharing my own experiences, or offering my own opinion. I had to remember that our talk was "an interview," NOT a "conversation." But as soon as the interview ended, I could talk more freely with her as a colleague.

Once again, we argue that it is advantageous for novice researchers to examine their own assumptions about interviewing and the stance (represented earlier by conversational and more formal approaches) that they are likely to take in the interview setting. These approaches will generate different types of data and imply different theoretical approaches to research generally and data analysis specifically.

## Phrasing and Negotiating Questions

This subtheme includes several interrelated issues concerning keeping the interview flow focused on the research topic and questioning (phrasing openended questions, providing appropriate probes for follow-up on respondents' accounts, question clarification, etc.). For example, one participant recognized the difficulties she had in keeping the interview talk focused and related to her research topic. This participant commented in her reflections, "My frustrations came with my questions and the way I asked them. I did not do a very good job." She stated:

I was disappointed with how I asked the questions, my failure to get more stories, and how I let the interview seem to go all over the place. In the end I was grasping for things and it did not stay focused on school experiences. After reflecting on the interview I also realized that I left out the focus of being a woman. I did not ask any questions about what [my participant's] experiences were as a Black woman. (Heather)

This was common in the data we analyzed. Irene described the lack of focus on the research topic as the major problem with her interview:

The biggest problems that I seem to have consistently center around focus. Sometimes that focus problem occurs because I'm interested in what the participant is saying and completely forget to get back focused on the research topic and sometimes it occurs because the participant is talking about something that is of interest to me so I encourage them to keep talking about that rather than the research topic at hand.

Leah also reflected on the relationship between her research questions and interview questions and her intent as a researcher generating data for a specific purpose.

Since I'm uncertain about my research question, there should be more clarity with my topic. Some of the questions I asked have nothing or little to do with my research question. Since I'm interested in teachers' perceptions, after context setting, I should go directly to [where] I want the interview to go. Get the question focused on [the] research question.

As seen in earlier excerpts, these students showed cognizance of the socially constructed nature of interview talk, recognizing that how their interview questions were articulated produced certain kinds of responses (and not others).

As in the quotation used at the opening of this article, some interviewers found themselves being questioned by participants concerning their questions. This often resulted in complex interaction concerning clarification of the topic being discussed. For example, Leah reflected:

But when I asked her to tell me about her teaching experience just within the classroom, she found the question vague and wanted me to clarify. I didn't expect that this seemingly straightforward question would have to be explained. So at that time, I failed to rephrase the question. Instead, I took a glimpse on the questions in my guide and came up with a really ill conceived question, "Tell me about what you believe about learning." I believe I was giving [my participant] a hard time asking that question. She was at a loss for a while and was struggling to come up with something relevant to my peer question. I noted her situation and jumped in by giving her, I believe, an easier question.

This clarification of the interviewers' questions occurred in multiple interviews analyzed in this study but is illustrated by examining the section to which Leah refers in her aforementioned reflective statement:

Leah: So, uh, yeah. Tell me more about your teaching experiences just within the classroom, like instruction in the classroom.

Participant: Uh, do you, are you looking at, you want me to talk about what I did in the classroom or my experiences of kids in the classroom, or what would you like me to . . .

Leah: Yeah, okay. Uh, tell me about [what] you believe about learning.

Participant: Hmmm. In terms of nature of learning?

Leah: Yes, in terms of nature of learning. And how do you use this, your belief or employ your belief into your classroom instruction?

Participant: Okay, uh, in terms of . . . learning theory, although I must admit, I am desperately in need of a refresher course on learning theory. Uh, I, I see, uh, I think that the human brain is capable of different levels of thought and that those structures develop over time as kids age. And they go from a sensory motor stage through a concrete operation, abstract operation stage.

Students' reflective comments concerning difficulties related to phrasing of questions focused on constructing open-ended questions and recognizing the characteristics of speech that are natural to conversation (i.e., stumbles and slips in the articulation of questions) appearing within their own talk. Sharon, for example, noticed that her questions were often "long and windy."

As I look over my transcripts I am embarrassed about the long and windy questions. A beautiful example would be "Of course. Good. So when you talk about, when you were talking about your high school experiences, and you talked about that especially that extra curricular activities led to positive relationships and positive things, what would a positive relationship or those positive things look like between you and a parent?"

#### Similarly, Roberta commented:

The questions that I considered particularly bad include the following. The poorly worded question regarding how [my participant] felt when her cooperating teacher asked her opinion of what worked and what didn't during a lesson because it was wordy and ended up making little sense even to me. The question about who helped her learn to teach history or pedagogy, which was again, too wordy and confusing. And the question that got the interview off track—the one about an example of a specific history lesson.

Another participant, Eleanor, commented on a different aspect in her critique:

While transcribing the interview, I was aggravated at how many times I said "um" in asking my questions. Also, I almost always said, "tell me a little bit about" which bothers me. I think I did that in an effort to put [my respondent] at ease, but I shouldn't say that, when what I really mean is "tell me in as much detail as possible."

Although we do not advocate for the elimination of continuers such as "um"—such talk might prove unnatural and difficult to achieve—we believe that it is useful for students to notice their own speech practices and reflect on how these contribute to the flow of talk. Through reflection on how interview data is co-constructed, novice interviewers will gain a fuller understanding of the different kinds of data that might be produced.

# Dealing With Sensitive Issues

Occasionally, these novice interviewers encountered "sensitive topics" that posed interactional difficulties. For example, Eleanor's respondent began to cry at one point in the interview. Eleanor chose to continue with the interview, and after a softly spoken comment, "that's all right," immediately posed another question. Her respondent recovered quickly and continued with the interview. In her reflections, this student described how her respon-

dent "got pretty emotional" and that the interview at this point was "getting too tough." Because she was not "comfortable probing for any more detail," changing the topic was seen to be a useful way out of trouble.

Another student encountered a similar emotional situation in her interview. In her reflection, Claire described her reaction to her respondent Laura's crying as follows:

I became more vocal with affirmative utterances such as: "umm," after the part in the interview where Laura began to struggle with her emotions. After a while, I tapered off again. This was not a conscious action on my part; I only noticed it upon transcribing the interview. I think it was a natural reaction on my part to her distress, an effort to lend her my support the only way I could at that point. It did not seem to distract her, so I think it was a positive thing.

Handling "emotional" situations in which both they and/or their respondents experienced strong emotional states was common in our data sets. However, students commonly expressed relief when they found that they handled the situation competently.

Other participants encountered "difficult questions" that were hard to ask (Weiss, 1994, p. 76). For example, Heather described her difficulties in asking one of her questions, "Tell me about racial incidents or experiences that you had in schools." She commented:

I did not handle this very well. I was nervous about asking this, which I need to get over. Also, I do not think [my respondent] wanted to go there with me. When I asked the question she looked at me strangely. I did not do a good job of preparing her for the questions. It just came from out of the sky. I've got to think about how I can do this in order for the Black women in my study to be willing to share their experiences with a White female. I think that this question would be important to use in a second interview after we had established a rapport and trust. I definitely have decided on multiple interviews with my participants.

This student has defined the problem in her interview as one of "rapport" that may be remedied by multiple interviews. The reasoning Heather displays here is that if she knows her respondents well and develops high levels of rapport, she will be more likely to receive detailed responses to "sensitive questions." This is in fact the approach to difficult questions recommended by Weiss (1994), who advocated developing a "reliable research relationship before entering the area" (p. 76).

# Transcription Issues

Once the actual interview was completed, the class was challenged once more, this time through the transcription process. For example, Leah summed up a common sentiment among the students: The whole process of doing the transcription is lonely and tiring. But I see it as a necessary step, for novice interviewers in particular, to realize what kind of work we are going to be involved in, to get the first-hand experience of processing the data we collected, and to start data analysis from the moment you turn on the recorder and transcriber. It is a tough job, but has to be tough to be challenging enough for many researchers.

For Leah, the transcription process was particularly challenging because English is not her first language. She explained:

The transcription process is intensive and tough. With English as my foreign language, I found myself getting stuck many times in the transcribing process. I play by the rule of "rewind multiple times and move on." If I still couldn't get it, I made my best guesses possible and marked the place with (?). This experience also reminds me of the difficulties and problems I might come across in my future interviews when I have to interview native speakers of English. It's so hard for me to comprehend when [my participant] began to talk fast in her low and soft voice.

Our investigation of the transcripts and audiotapes showed considerable variation of practice in transcription. Although some students provided close and detailed transcriptions with keys to conventions used, others missed sections of talk. For example, one participant's tape stopped midway, a story appears to have passed unrecorded, and the gap in the interview was not acknowledged in the transcript or reflection. Although there is a considerable variety of thought represented in the literature with regard to transcription practice (and students' journal entries were representative of these views), we urge students to pursue detailed transcriptions. We encourage this practice not as a means of ensuring that students capture the "truth" of what happened during the interview but rather to ensure that the transcript provides a thorough account of the oral record in keeping with the theoretical assumptions underpinning the study. Interview data is generated through a socially constructed investigation of the research topic and as such, is open to multiple meanings. We argue that accurate and detailed transcriptions are particularly important from a pedagogical standpoint because within the context of a course designed to develop students' interviewing skills, a primary purpose is to examine the transcriptions produced not so much for the content of what was said but how accounts were coproduced by speakers (the process) (Poland, 2002). More important, we believe class discussions concerning the implications of the types of transcriptions undertaken by researchers for ensuing analyses is an important component of any interviewing course. Through such discussions, students might gain a deeper appreciation of the theoretical and empirical implications of any particular transcription practice and what analyses are made available.

## Reflections on Learning and Teaching Interviewing

In this section we discuss in some detail the content of what students reflected on in their self-critiques of their in-depth interviews. What did students learn from the process? What features of the interview process did they interrogate? Were there any features of their process of which they appeared to be unaware?

First, students reflected on what they had learned about themselves. This included their strengths and weaknesses as interviewers, their need to develop more effective interview skills, their personal preferences in interview style (conversational or more structured), and how their subjectivities impacted the direction of the interview through what probes they chose to use. For example, Heather wrote in her reflection:

Having time to reflect upon the process has been most helpful. The readings and examples in class helped me to see more clearly what a good interview should be. The actual interview helped me to see my strengths and weaknesses and how I need to improve. Overall, it was a great learning opportunity. I plan for the next interview to be very different. I am so thankful for this experience now instead of waiting until I begin the interviews with the participants of my study. I can see how the interviews and questions asked can make a great impact on the study. I think I need to practice my interviewing skills throughout the year so that I will be ready to conduct interviews that will be meaningful to my participants and inform my study. Interviewing is truly a complicated process, but one that I do enjoy and have fun conducting.

Second, students looked closely at the questions they formulated and what kinds of responses they elicited from interview participants. In instances where interview questions were treated by respondents as problematic, the novice interviewers reflected on alternative phrasings of questions, how to build rapport with respondents with regard to sensitive topics, and the implications for future research design (e.g., the conduct of multiple rather than single interviews so that sensitive questions could be asked later in the research sequence). One example comes from Claire's reflection:

The question addressed a fascinating subject I really wanted to explore, concerning cultural difference; but the way I phrased the question, I do not think the answer enlightened us any more to the experience of anger. I should have said, "Your method of handling anger seems to be different than that of your mother-in-law. Can you talk to me about that?" This phrasing of the question might have gotten into her process of dealing with anger, and it could have picked up some interesting cultural information along the way.

Not all students showed that they were able to reflect deeply on the interview process, that is, the how of interaction rather than the what of interaction. Although some students' reflections devoted a substantial proportion of discussion to preliminary analysis of the content of talk (produced by the respondent) and how this related to the interviewer's research topic, few

looked deeply at the interview from the perspective of how the interaction was accomplished. This certainly reflects the literature extant in the field of interviewing because it is the content of interviews that is seen to be of primary interest, not how that content was achieved by speakers within the interview setting. Indeed, Briggs (1986) commented that by "leaving the interview situation itself out of the analysis, we have cleverly circumvented the need to examine our own role in the research process" (p. 4).

We take one vivid example to illustrate this point. One of our novice interviewers, while examining some of her interviewing practices and explaining how they might be improved did not identify significant features of her interview in her reflective statement. These included (a) a large number of assessments (Pomerantz, 1984) and formulations (Heritage & Watson, 1979) in her talk and (b) use of closed questions. We discuss each of these in turn.

Assessments. Assessments are statements used by speakers to claim knowledge about that which is being assessed (Pomerantz, 1984). In her analysis of interview data, Kelly (2001) showed how interview respondents may use assessments for the purposes of praise and criticism. In the following, we see examples of assessments provided by Heather in her interview that do the work of praising her respondent.

I bet she was so excited. You must have been a superstar. I bet he saw you and just was taken You would have been wonderful.

Kelly's analyses show how individuals do considerable "identity work" to establish an entitlement to give these assessments or opinions. In the preceding examples, the interviewer's lack of entitlement to provide these opinions is shown by her use of phrases such as "I bet," "you must," and "you would." Post hoc analyses provide no clue as to what kind of data would have been produced had such assessments been withheld—however, it is useful for interviewers to reflect on what such assessments contribute to the talk.

Formulations. Formulations are statements in which speakers paraphrase prior utterances through preserving, deleting, and transforming information produced by other speakers (Heritage & Watson, 1979). In the following excerpt, we see how the researcher preserves information (her respondent comes from a family of 10 children), deletes information (her respondent's description of her mother as not doing much "but have babies"), and transforms the information (her respondent's mother as "busy" and washing clothes for the family).

Participant: I had older brother and sisters, older than I was; I am the youngest of the first five. And they all worked, my brother went into the service and he came out the year before my dad died and got a job and helped out, and so, when I got into

12th grade I worked on weekends, my mother had never worked public work in her life. She had never done much of anything, but have babies ((laughter)).

Researcher: She was doing a lot, she was busy.

Participant: And my Dad thought she was a queen. She didn't even wash dishes or do anything, 'cos she had so many kids.

Researcher: Yes she didn't have time. Bless her heart. I can't imagine 10 children, just washing the clothes for 10 kids.

Participant: She never did do that, she probably did it when the oldest ones were small, but she didn't do it when we grew up, everybody had a job . . .

In this extract, we see the participant providing responses that show disagreement with the interviewer's prior utterances. For researchers who propose to gain an understanding of their participants' views, it is important to be aware of the researcher's work in making formulations and the consequences for data generated.

Closed questions. When posed closed questions that could have been answered by yes/no responses, the interview respondent repeatedly gave short answers that provided little scope for elicitation of further talk via further probes from the researcher. Two examples of closed questions illustrate this point:

Q: Do you still sing in church?

A: I sing in church.

Q: Do you still have a class reunion?

A: We hadn't had a class reunion in about 20 years.

In failing to recognize features of their own interactional styles as in the preceding example, interviewers overlook the implications for the kind of interview data they are likely to co-construct with their participants. This is further complicated if the transcription process is investigated in relation to what is audible on the tape. As noted earlier, although most of the participants provided close and accurate transcripts of their interviews, some did not. For example, in several transcripts we read while listening to the audiotapes, some sections of data were missing, possibly because they were considered to be irrelevant by the transcribers.

Other students accurately pinpointed some of their question-posing problems within their reflections. For example, Irene commented on her use of a multiple question:

I still have problems phrasing some of my questions in a jerky sort of manner. The question that starts in line 343, "So, with the activities—how do you decide which ones you will use vs., or where do you get them from even?" is an example. Here, I also asked two questions instead of just one.

Our point here is not to critique these students' reflective abilities or their beginning work as interviewers but to consider ways of facilitating learning experiences—for example, through providing pertinent readings, timely discussions, and apt questions—that will aid students to reflect deeply on their interviewing practice and the implications for their work as researchers.

#### CONCLUSION AND RECOMMENDATIONS

Our analysis of data revealed that the interview process challenged students. This occurred in multiple ways. Students' concentration was thwarted by unanticipated behaviors of participants and distractions in interview settings, and the research focus was sometimes lost through the researchers' own actions, such as poor phrasing and delivery of questions and not listening closely. Some novice interviewers had difficulty constructing and using interview questions that were open ended and focused on their research purpose. In addition, once these questions were refined, they found it difficult in the actual interview not to elaborate extensively, consequently forfeiting the clarity of the question. Using probes to extend an interview participant's points was challenging for many of these novice interviewers. Some tended to accept a participant's response and move directly to the next question rather than ask for elaborations or clarifications of meaning, whereas others provided formulations of prior talk that served to transform the meaning of their respondents' utterances. The interview process was at times complicated by the students' difficulty in being present or active listeners. Rather than listening, some students reported being engaged in analyzing the way the participants' experiences fit with their own research interests or thinking about the next question. Students spoke of being overwhelmed by all the things they had to attend to in the interview setting and referred to their selftalk within the interviews in which they worried about their performance as researchers. In several of these interviews, students were confronted with the emotional aspects of the interview process—both in experiencing difficult emotions themselves and in understanding the emotional effect of the interviews on their participants. Furthermore, the transcription process that followed the interview proved to be yet another hurdle for some, often tedious—if not self-revealing.

We conclude the article by presenting some points of consideration for those who teach interview skills for social science research purposes with the hope that we who are teachers and researchers might assist novice researchers who plan to use interviews as a data generation tool to develop sound skills in the area (and not repeat our own errors). Specific strategies to improve the teaching of qualitative interview methods include the following.

Conduct interviews as part of authentic research projects. Engaging students in multiple interviews as part of real-life research studies provides them with

opportunities to gain and develop skills in negotiating entry with people who are not familiar to them. In authentic studies the purpose of the interview is clear, whereas this may not be so when students conduct interviews (often with known individuals) for the purposes of a class assignment. Students are also more likely to feel a responsibility for high-quality interviewing that may not be present in a practice interview conducted with a class member or peer.

Close, guided analysis of interview tapes and transcripts. We suggest multiple ways that close, guided analysis of interview tapes and transcripts might be achieved, including peer review of transcripts and audiotapes, use of videotaping with peer review, and small group analysis of interview data, including attention to content and process. As a starting point, we include possible topics and questions for analysis and reflection in Appendices A and B.

Class discussions concerning research design and researchers' assumptions. This could include discussion of topics such as the interrelationship between research questions and focus and the interview questions and the researchers' assumptions and conceptions of interviewing as a research method.

Our initial experiences in using these strategies with other students have proved highly productive and will be subject to further investigation. We believe that it is important to study the development of interview skills by novice researchers for two reasons. First, the research interview is widely used in the social sciences as a method of generating data. As Briggs (1986) noted, "the validity of a great deal of what we believe to be true about human beings and the way they relate to one another hinges on the viability of the interview as a methodological strategy" (p. 1). Therefore, it is imperative that adequate training of social science researchers employing interviews be provided. Second, although some researchers have provided specific guidelines for the construction of interview questions and the conduct of interviews (Foddy, 1993; Kvale, 1996; Spradley, 1979; Weiss, 1994), others have provided strong critiques of interviewing as a research method (Atkinson & Silverman, 1997; Scheurich, 1995). Although we are aware that researchers should be cognizant of such critiques, we argue that with appropriate guidance, novice interviewers can develop more effective interviewing skills. Although there are a plethora of texts about interviewing as a research method, we have found little empirical research regarding the teaching of interviewing to guide us as university educators in the development of curricula. Therefore, this research, which specifically investigates one such interview course, will be potentially useful to those teaching qualitative research methods courses in addition to novice researchers undertaking such courses. We believe that we can assist researchers to develop interview skills and that this development is assisted through guided practice. We conclude by quoting Leah, one of our novice interviewers: "There is nothing more convincing than the saying 'the most effective way to learn how to interview is by doing it."

# Appendix A Sample Grading Rubric: Interview Project

Student name:	Date submitted:		
	Criteria for Grading	Points	Your Points
Interview	Interviewer:	10	
	Explained the project (including human subjects aspects)		
	Established rapport		
	Asked clear, short, open-ended questions		
	Used probes to elaborate meanings		
	Questions are focused on research question		
	Listened carefully		
	Was able to elicit detailed responses to the questions		
	Demonstrated application of principles of an in-depth qualitative interview as modeled, discussed, and rehearsed		
Transcription	Tape was thoroughly transcribed	5	
	Format of transcription was clear and easy to read (questions bolded, responses not bolded, spaces provided between speakers)		
	Pages numbered		
	Lines numbered		
	Identifying information (pseudonym/date) in header or footer		
	No real names used for people or places		

# Appendix A (continued)

Student name:	Date submitted:		
	Criteria for Grading	Points	Your Points
Self-critique	Critique is a thoughtful analysis of the interview process Demonstrates ability to reflect on and evaluate interviewer's role Provides evidence of thorough analysis in which interviewer listened to the tape, examined the transcription, and looked for patterns in the methods and skills of the interviewing process Present findings of analysis in thematic format with specific examples from text to support points and suggest improvements		
Total points	Relates findings of analysis to class reading and discussions	10 25	

Instructor's comments:

# Appendix B Reflection Guidelines

# **Qualitative Interview Project**

The following are questions to consider as you reflect on your interview process and write those reflections for submission with your transcript and tape. Be sure that you provide examples from the tape to support your points.

- 1. How do you think you did with the explanation of the research purpose?
- 2. How do you think you did with the explanation of the consent process and form?
- 3. How did the interview context enable or constrain the interview process?
- 4. How did you do in building rapport with the participant?
- 5. What kind of questions did you ask in the interview?
- 6. What kinds of responses did you get?
- 7. How did your questions influence the participants' responses?
- 8. Did you put possible responses into the questions?
- 9. Did you ask closed-ended questions? Open questions?
- 10. Did you use more than one question in your utterance?
- 11. How did you handle your wait time within the interview?
- 12. Was there overlapping talk in the interview? Interruptions?
- 13. Did you use continuers such as um, okay, mm-hmm?
- 14. Do you treat interviews as conversation? If so, what was your input into the conversation?
- 15. Did you evaluate the participants' responses to your questions within the interview? If so, how did the participant respond to this evaluation?
- 16. Were your interview questions focused on the purpose of the research and your research questions?
- 17. What would you do differently if you were able to do the same interview again?
- 18. What suggestions for improvement do you have for your own interview techniques?

### **NOTES**

- 1. Pseudonyms are used throughout the article for all students and interview participants.
- 2. The requirements for the certificate include the completion of five qualitative courses (three of which are core) and a dissertation that uses a qualitative design.

#### REFERENCES

- Atkinson, P., & Silverman, D. (1997). Kundera's *Immortality*: The interview society and the invention of the self. *Qualitative Inquiry*, 3, 304-325.
- Baker, C. D. (1997). Membership categorisation and interview accounts. In D. Silverman (Ed.), Qualitative research: Theory, method and practice (pp. 130-143). London: Sage.
- Baker, C. D. (2002). Ethnomethodological analyses of interviews. In J. Gubrium & J. Holstein (Eds.), Handbook of interviewing: Context and method (pp. 777-795). Thousand Oaks, CA: Sage.
- Brieschke, P. (1997). Race (inter)views: From the classroom to public discourse. *International Journal of Qualitative Studies in Education*, 10, 85-99.
- Briggs, C. (1986). Learning how to ask: A sociolinguistic appraisal of the role of the interview in social science research. Cambridge, UK: Cambridge University Press.
- Dunaway, D. K., & Baum, W. K. (Eds.). (1996). Oral history: An interdisciplinary anthology (2nd ed.). Walnut Creek, CA: Altamira Press.
- Foddy, W. (1993). Constructing questions for interviews and questionnaires: Theory and practice in social research. Cambridge, UK: Cambridge University Press.
- Graham, H. (1983). Do her answers fit his questions? Women and the survey method. In E. Garmarnikow, D. H. J. Morgan, J. Purvis, & D. Taylorson (Eds.), *The public and the private* (pp. 132-146). London: Heinemann.
- Greenbaum, T. L. (1993). *The handbook for focus group research* (Rev. ed.). Lexington, MA: Lexington Books.
- Gubrium, J., & Holstein, J. (Eds.). (2002). *Handbook of interviewing: Context and method*. Thousand Oaks, CA: Sage.
- Heritage, J. C., & Watson, D. R. (1979). Formulations as conversational objects. In G. Psathas (Ed.), Everyday language: Studies in ethnomethodology (pp. 123-162). New York: Irvington.
- Hindle, P. (2000). Developing employment interview and interviewing skills in small-group project work. *Journal of Geography in Higher Education*, 24, 29-36.
- Holstein, J. A., & Gubrium, J. F. (1995). The active interview. Thousand Oaks, CA: Sage.
- Kelly, M. (2001, July). Assessment work in research interviews. Paper presented at the International Institute for Ethnomethodology and Conversation Analysis, "Orders of Ordinary Action," Manchester, UK.
- Krueger, R. A., & Casey, M. A. (2000). Focus groups: A practical guide for applied research. Thousand Oaks, CA: Sage.
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.
- Lynch, D. J., & Tamurrino, M. B. (1992). Teaching interview skills: The effect of instructors' academic department. *Medical Teacher*, 14, 59-64.
- Mannion, L., Browne, S., & Fahy, T. J. (1999). Teaching psychiatric consultation skills by video interview: A survey of student opinion. *Medical Teacher*, 21, 85-86.
- McCracken, G. (1988). The long interview. Newbury Park, CA: Sage.
- Merriam-Webster. (2001). *Merriam-Webster's collegiate dictionary* (10th ed.). Chicago: International Thomson Publishing.
- Mishler, E. G. (1986). Research interviewing: Context and narrative. Cambridge, MA: Harvard University Press.

- Morgan, D. L., & Krueger, R. A. (1998). The focus group kit. Thousand Oaks, CA: Sage. Nestel, D. (2001). Evaluation of a communication skills course: Cultural relevance of the patient-centered interview in a Hong Kong Chinese setting. Medical Teacher, 23, 212-214
- Oakley, A. (1981). Interviewing women: A contradiction in terms. In H. Roberts (Ed.), Doing feminist research (pp. 30-61). London: Routledge.
- Poland, B. D. (2002). Transcription quality. In N. Denzin & Y. S. Lincoln (Eds.), *Handbook of interview research: Context and method* (pp. 629-650). Thousand Oaks, CA: Sage.
- Pollio, H. R., Henley, T. B., & Thompson, C. J. (1997). The phenomenology of everyday life. New York: Cambridge University Press.
- Pomerantz, A. (1984). Agreeing and disagreeing with assessments: Some features of preferred/dispreferred turn shapes. In J. M. Atkinson & J. Heritage (Eds.), Structures of social action: Studies in conversation analysis (pp. 57-101). Cambridge, UK: Cambridge University Press.
- Rapley, T. J. (2001). The art(fulness) of open-ended interviewing: Some considerations on analyzing interviews. *Qualitative Research*, 1, 303-323.
- Rapley, M., & Antaki, C. (1998). "What do you think about . . . ?" Generating views in an interview. *Text*, *18*, 587-608.
- Reinharz, S. (1992). Feminist methods in social research. New York: Oxford University Press.
- Riessman, C. K. (1993). Narrative analysis. Newbury Park, CA: Sage.
- Riessman, C. K. (2002). Analysis of personal narratives. In J. Gubrium & J. A. Holstein (Eds.), *Handbook of interview research: Context and method* (pp. 695-710). Thousand Oaks, CA: Sage.
- Rohn, C. A., & Lee, D. (2001). A collaborative effort to provide authentic experience in interviewing for pre-service teachers and administrative interns. *Education*, 121, 549-553
- Roulston, K. (2001). Data analysis and "theorizing as ideology." *Qualitative Research*, 1, 279-302.
- Roulston, K., Baker, C., & Liljestrom, A. (2001). Analyzing the interviewer's work in the generation of research data: The case of complaints. *Qualitative Inquiry*, 7, 745-772.
- Sacks, H. (1992). Lectures on conversation (G. Jefferson, Ed.). Cambridge, MA: Blackwell.
- Scheurich, J. J. (1995). A postmodernist critique of research interviewing. *International Journal of Qualitative Studies in Education*, 8, 239-252.
- Seidman, I. E. (1991). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York: Teachers College Press.
- Silverman, D. (1997). Towards an aesthetics of research. In D. Silverman (Ed.), *Qualitative research: Theory, method and practice* (pp. 239-253). London: Sage.
- Spradley, J. (1979). *The ethnographic interview*. Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.
- Usherwood, T. (1993). Subjective and behavioral evaluation of the teaching of patient interview skills. *Medical Education*, 27, 41-47.
- Walker, G. (1993). Mock job interviews and the teaching of oral skills. *Journal of Geography in Higher Education*, 17, 73-78.
- Weiss, R. S. (1994). Learning from strangers: The art and method of qualitative interview studies. New York: Free Press.
- Wolcott, H. (1999). Ethnography: A way of seeing. Walnut Creek, CA: Altamira Press.

Kathryn Roulston is an assistant professor in the Qualitative Inquiry Program, Department of Educational Psychology, at the University of Georgia. Her research interests take in qualitative research methodology and the application of conversational and ethnomethodological approaches to research topics, including music education. Her current research investigates young children's music preferences.

Kathleen deMarrais is a professor and coordinator of the Qualitative Inquiry Program, Department of Educational Psychology, at the University of Georgia. Her research interests include qualitative research methodologies, qualitative pedagogy, and the preparation of teachers for diverse communities. Her current research investigates female teachers' emotions, particularly anger, in school and classroom contexts.

Jamie B. Lewis is a doctoral candidate in social foundations of education at the University of Georgia. Her research interests include historical and qualitative research methodologies and the sociopolitical and historical contexts of education for marginalized groups. Her dissertation examines the production of segregated education as a social problem.