Preparing for Interview Research: The Interview Protocol Refinement Framework

Milagros Castillo-Montoya
University of Connecticut - Storrs, milagros.castillo-montoya@uconn.edu

Follow this and additional works at: http://nsuworks.nova.edu/tqr
Part of the Educational Methods Commons, and the Quantitative, Qualitative, Comparative, and Historical Methodologies Commons

Recommended APA Citation

This How To Article is brought to you for free and open access by the The Qualitative Report at NSUWorks. It has been accepted for inclusion in The Qualitative Report by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.
Preparing for Interview Research: The Interview Protocol Refinement Framework

**Abstract**
This article presents the interview protocol refinement (IPR) framework comprised of a four-phase process for systematically developing and refining an interview protocol. The four-phase process includes: (1) ensuring interview questions align with research questions, (2) constructing an inquiry-based conversation, (3) receiving feedback on interview protocols, and (4) piloting the interview protocol. The IPR method can support efforts to strengthen the reliability of interview protocols used for qualitative research and thereby contribute to improving the quality of data obtained from research interviews.

**Keywords**
Interviewing, Interview Protocols, Qualitative Pedagogy, Research Interviews

**Creative Commons License**
This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 4.0 License.

**Acknowledgements**
Thank you to the graduate students in Assessment, Evaluation, and Research in Student Affairs, Blanca Rincón, Sarah Woulfin, and Robin Grenier for valuable input on this manuscript.
Preparing for Interview Research:  
**The Interview Protocol Refinement Framework**

Milagros Castillo-Montoya  
University of Connecticut, Storrs, Connecticut, USA

This article presents the interview protocol refinement (IPR) framework comprised of a four-phase process for systematically developing and refining an interview protocol. The four-phase process includes: (1) ensuring interview questions align with research questions, (2) constructing an inquiry-based conversation, (3) receiving feedback on interview protocols, and (4) piloting the interview protocol. The IPR method can support efforts to strengthen the reliability of interview protocols used for qualitative research and thereby contribute to improving the quality of data obtained from research interviews.  

Keywords: Interviewing, Interview Protocols, Qualitative Pedagogy, Research Interviews

Interviews provide researchers with rich and detailed qualitative data for understanding participants’ experiences, how they describe those experiences, and the meaning they make of those experiences (Rubin & Rubin, 2012). Given the centrality of interviews for qualitative research, books and articles on conducting research interviews abound. These existing resources typically focus on: the conditions fostering quality interviews, such as gaining access to and selecting participants (Rubin & Rubin, 2012; Seidman, 2013; Weiss, 1994); building trust (Rubin & Rubin, 2012); the location and length of time of the interview (Weiss, 1994); the order, quality, and clarity of questions (Patton, 2015; Rubin & Rubin, 2012); and the overall process of conducting an interview (Brinkmann & Kvale, 2015; Patton, 2015).

Existing resources on conducting research interviews individually offer valuable guidance but do not come together to offer a systematic framework for developing and refining interview protocols. In this article, I present the interview protocol refinement (IPR) framework—a four-phase process to develop and fine-tune interview protocols. IPR’s four-phases include ensuring interview questions align with the study’s research questions, organizing an interview protocol to create an inquiry-based conversation, having the protocol reviewed by others, and piloting it.

Qualitative researchers can strengthen the reliability of their interview protocols as instruments by refining them through the IPR framework presented here. By enhancing the reliability of interview protocols, researchers can increase the quality of data they obtain from research interviews. Furthermore, the IPR framework can provide qualitative researchers with a shared language for indicating the rigorous steps taken to develop interview protocols and ensure their congruency with the study at hand (Jones, Torres, & Arminio, 2014).

IPR framework is most suitable for refining structured or semi-structured interviews. The IPR framework, however, may also support development of non-structured interview guides, which have topics for discussions or a small set of broad questions to facilitate the conversation. For instance, from a grounded theory perspective, piloting interview protocols/guides are unnecessary because each interview is designed to build from information learned in prior interviews (Corbin & Strauss, 2015). Yet, given the important role the first interview plays in setting the foundation for all the interviews that follow, having an initial interview protocol vetted through the recursive process I outline here may strengthen the quality of data obtained throughout the entire study. As such, I frame the IPR framework as a viable approach to developing a strong initial interview protocol so the researcher is likely to
elicit rich, focused, meaningful data that captures, to the extent possible, the experiences of participants.

The Four-Phase Process to Interview Protocol Refinement (IPR)

The interview protocol framework is comprised of four-phases:

- Phase 1: Ensuring interview questions align with research questions,
- Phase 2: Constructing an inquiry-based conversation,
- Phase 3: Receiving feedback on interview protocols
- Phase 4: Piloting the interview protocol.

Each phase helps the researcher take one step further toward developing a research instrument appropriate for their participants and congruent with the aims of the research (Jones et al., 2014). Congruency means the researchers’ interviews are anchored in the purpose of the study and the research questions. Combined, these four phases offer a systematic framework for developing a well-vetted interview protocol that can help a researcher obtain robust and detailed interview data necessary to address research questions.

Phase 1: Ensuring Interview Questions Align With Research Questions

The first phase focuses on the alignment between interview questions and research questions. This alignment can increase the utility of interview questions in the research process (confirming their purpose), while ensuring their necessity for the study (eliminating unnecessary ones). A researcher wants intentional and necessary interview questions because people have complex experiences that do not unravel neatly before the researcher. Instead, helping participants explain their experiences takes time, careful listening, and intentional follow up. A researcher wants to keep in mind:

The purpose of in-depth interviewing is not to get answers to questions… At the root of in-depth interviewing is an interest in understanding the lived experiences of other people and the meaning they make of that experience…. At the heart of interviewing research is an interest in other individuals’ stories because they are of worth. (Seidman, 2013, p. 9)

People’s lives have “worth” and a researcher wants to approach inquiring into their lives with sensitivity. Given the complexity of people’s lives and the care needed to conduct an interview, a researcher can benefit from carefully brainstorming and evaluating interview questions before data collection. The questions help participants tell their stories one layer at a time, but also need to stay aligned with the purpose of the study.

To check the alignment of questions you can create a matrix for mapping interview questions onto research questions. Tables 1 and 2 offer examples of matrices with interview questions listed in rows and research questions in columns. You can then mark the cells to indicate when a particular interview question has the potential to elicit information relevant to a particular research question (Neumann, 2008).

The process of creating this matrix can help display whether any gaps exist in what is being asked. The researcher can now assess and adjust or add interview questions if too many are related to one research question and too few to other research questions. Otherwise, you may not notice the potential information gap until after data collection is complete. Also, the matrix can help the researcher observe when questions are asked (e.g., beginning, middle, end).
Ideally, the researcher asks the questions most connected to the study’s purpose in the middle of the interview after building rapport (Rubin & Rubin, 2012). Once a researcher has a sense of which interview questions are most likely to address which research questions, he/she/ze can mark them in the final interview protocol as the key questions to ask during the interview.

Confirming the alignment between interview questions and research questions does not suggest that a researcher mechanically creates interview questions directly from the research question without attention to the contexts shaping participants’ lives including their everyday practices or languages—a point further discussed below in phase 2. As Patton (2015) stated, “you’re hoping to elicit relevant answers that are meaningful and useful in understanding the interviewee’s perspective. That’s basically what interviewing is all about” (p. 471). In summary, phase 1 focuses on the researcher developing an interview protocol aligned with the study’s purpose. In the second phase, the researcher focuses on ensuring the interview protocol supports an inquiry-based conversation.

**Phase 2: Constructing an Inquiry-Based Conversation**

A researcher’s interview protocol is an instrument of inquiry—asking questions for specific information related to the aims of a study (Patton, 2015) as well as an instrument for conversation about a particular topic (i.e., someone’s life or certain ideas and experiences). I refer to this balance between inquiry and conversation as an inquiry-based conversation. To guide a conversation and move an inquiry forward takes both care and hard work (Rubin & Rubin, 2012). Phase 2 entails the researcher developing an inquiry-based conversation through an interview protocol with: a) interview questions written differently from the research questions; b) an organization following social rules of ordinary conversation; c) a variety of questions; d) a script with likely follow-up and prompt questions.

To develop a protocol that promotes a conversation, compose interview questions different from how you would write research questions. As noted in phase 1, research questions are different from interview questions. Maxwell (2013) pointed out the functional difference between research questions and interview questions:

> Your research questions formulate what you want to understand; your interview questions are what you ask people to gain that understanding. The development of good interview questions (and observational strategies) requires creativity and insight, rather than a mechanical conversion of the research questions into an interview guide or observation schedule, and depends fundamentally on your understanding of the context of the research (including your participants’ definitions of this) and how the interview questions and observational strategies will actually work in practice. (p. 101)

As the researcher you can use your knowledge of contexts, norms, and every-day practices of potential participants, to write interview questions that are understandable and accessible to participants. Brinkmann and Kvale (2015) stated, “The researcher questions are usually formulated in a theoretical language, whereas the interview questions should be expressed in the everyday language of the interviewees” (p. 158). As such, consider the terms used by participants, ask one question at a time, and avoid jargon (Merriam, 2009; Patton, 2015).

Table 1 offers an example of the differences between research questions and interview questions. It is an interview matrix I created for a study on first-generation college students’ developing sociopolitical consciousness through their learning of sociology (Castillo-Montoya,
I interviewed the students who participated in that study three times throughout one academic semester. Most of the first interview is represented in the Table 1.

Table 1—Interview Protocol Matrix for Study on College Students’ Sociopolitical Consciousness (First Interview of Three)

<p>| Research Question #1: At the start of an introductory sociology course, how do first-generation African American and Latino students in a highly diverse institution of higher education reflect sociopolitical consciousness in their discussions about their lives and sense of self and society? How and to what extent do student discussions about their lives and sense of self and society indicate: | Background Information | Awareness of sociopolitical forces (i.e. race, class, gender, citizenship status, etc.)? | Understanding of sociopolitical forces? | Knowledge of the interconnection of sociopolitical forces? | Acts of critiquing and analyzing sociopolitical forces? | Other ways of thinking or acting toward sociopolitical forces? | How do the students describe themselves and society in relation to the sociopolitical forces operating in their everyday lives? |</p>
<table>
<thead>
<tr>
<th>Upbringing</th>
</tr>
</thead>
<tbody>
<tr>
<td>To begin this interview, I’d like to ask you some questions about the neighborhood where you grew up.</td>
</tr>
<tr>
<td>1. Based on the information that you provided in the questionnaire, you went to high school at ______. Did you grow up in ______?</td>
</tr>
<tr>
<td>If yes: Go to question #2</td>
</tr>
<tr>
<td>If no: Where did you grow up?</td>
</tr>
<tr>
<td>[Open-ended way to ask question: Let’s begin by discussing the neighborhood where you grew up. Where did you grow up?</td>
</tr>
<tr>
<td>Follow up:</td>
</tr>
<tr>
<td>What was that neighborhood/ town like when you were growing up there?]</td>
</tr>
<tr>
<td>2. How would you describe ______ (state neighborhood where they grew up)? In answering this question you can focus on the people, the families, the organizations, or anything else that stands out to you the most when you think about your childhood neighborhood.</td>
</tr>
<tr>
<td>3. People have different ways of viewing the way their neighborhoods and communities function. How would you compare the way you view the neighborhood where you grew</td>
</tr>
</tbody>
</table>
up, to the way your parents (or guardians) view that neighborhood?
Follow up: Do you see your childhood neighborhood in the same way or in a different way from your parents? How so?
Follow up: Why do you think you see your childhood neighborhood different or similar to your parents (or guardians)?
[Rephrased to avoid asking a “why” question: Can you tell me more about what makes you think that you have a different or similar view of your childhood neighborhood than your parents (or guardians)?]

4. How do you think that growing up in _________ influenced who you are today?

|   | X | X | X | X | X | X | X |

5. Sometimes a common experience, language, or way of being leads a group of people to identify as a community. For example, there are some people who identify as part of a cultural group because they share a common experience. Is there a community with which you identify? If says yes: Which

|   | X | X | X | X | X | X | X | X |
community is that?
Follow up:
A) What makes you identify with that community?
B) Is there some common experience, language, or way of being that defines ____ (name of community) as a community? What are they?
C) How did you know that you also belonged to ____ (name of community)?
D) When did you realize that you identified with that community?
E) Do you think others in your family also identify as belonging to ____ (name of community) community?
Prompt: Please tell me more about this.
If says no: In the questionnaire you completed, you marked off that you identify as _____. Can you tell me more about why you identify as ____?
Follow up: Do other people who are ____ (identity marked off) form a community for you?

6. Sometimes there are differences in the way people are viewed or treated within a community. The differences could be based on lots of things.
Do you think that being a ____ (male or female) influences the way others in your community ____ view you or interact with you?
If says yes: How so?
If says no: How did you come to see that being a ____ (male or female) does not matter in the ____ community?
Follow up: Are there other differences that matter within the ____ community?
Prompt: Please tell me more about that.

**Decision to Attend College**

Thank you for your responses. I’d like to now ask you questions regarding your decision to attend college.

7. In your questionnaire, you said that your ____ (mother, father, or guardian) had a ____ education. Is that correct?
   If says yes: Does that mean that you are the first in your family to enroll in college? If says no: Who else in your family has gone to college?

8. Can you tell me a bit about how you went about making the decision to pursue a college education?
   Follow up: You mentioned that ____ lead you to decide to go to college. Was anyone else involved in or influential to your decision to go to college?
   If says yes: Who else was
involved or influential (i.e. parents, guidance counselor, etc.)? How were they involved or influential in your decision making process? 

*Follow up:* Was there anything else that you think made you want to go to college? How did _____ influence you to want to go to college?

<table>
<thead>
<tr>
<th>9. How did your family respond to your decision to go to college?</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
</table>

10. Once you decided to attend college, how did you go about selecting which college to attend?

| 11. You mentioned earlier that you went about selecting a college by ___ (use participant’s words). At the point that you made the decision to come to this college, what most attracted you to this school? 

*Follow up:* Can you tell me a bit about that? | X | X | X | X | X | X | X |

12. You’ve taken ____ classes at this college, what classes stand out to you the most? 

*Follow up:* Can you tell me what made those classes stand out to you?

<table>
<thead>
<tr>
<th>Institution</th>
</tr>
</thead>
</table>

*Thank you for sharing information about your decision to attend college. I’d like to now ask you a few questions about your college/university.*
### Sociology Course

*Thank you. I’d like to now ask you a few questions specifically about your sociology course.*

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Is this your first class in sociology? If says yes: What do you think the word sociology means? If says no: What other sociology class have you taken before? <strong>Follow up:</strong> A) When did you take that class (or classes)? B) What would you say is the most important thing you learned in that course (or in those classes)? C) Based on your experience in that class (or classes), what do you think the word sociology means?</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### Students Doing Something with What They Know

*My final set of questions are focused on getting to know more about your outside of class experiences.*

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14. I know that you have taken ____ (number) classes college classes so far. Have you found that sometimes you remember something that you learned in one class while you are doing something or talking to someone outside of school? If says yes: Can you give me an example of a time when that happened for you? <strong>Follow up:</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
A) What was that experience like?  
B) Does that happen to you often?  

Before we conclude this interview, is there something about your experience in this college/university that you think influences how you engage in your classes that we have not yet had a chance to discuss?

Table 1 includes the study’s first research question and related sub-questions: At the start of an introductory sociology course, how do first-generation African American and Latino students in a highly diverse institution of higher education reflect sociopolitical consciousness in their discussions about their lives and sense of self and society? The sub-questions to this first research question can be found across the first row. I did a similar, but separate matrix for my second and third research questions. See Table 2 for an example of what an interview protocol matrix would look like when the researcher includes all the research questions.

Table 2—Example of Interview Protocol Matrix

<table>
<thead>
<tr>
<th>Interview Q 1</th>
<th>Background Information</th>
<th>Research Question 1</th>
<th>Research Question 2</th>
<th>Research Question 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview Q 2</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview Q 3</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Interview Q 4</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Interview Q 5</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Interview Q 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview Q 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview Q 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview Q 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview Q 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If I turned the research question from my study directly into an interview question, it would look something like this: Please describe your sociopolitical consciousness relative to your life and sense of self and society. This question, however, would overwhelm most people and is likely too broad and difficult to answer. To get responses to address my research questions, I asked a variety of interview questions (listed in Table 1). Some questions had students
discussing and describing the neighborhoods where they grew up. For instance, I asked, How would you describe ___________ (state neighborhood where they grew up)? Asking about their childhood neighborhoods was not the only way to get at students’ sociopolitical consciousness, but one way. It helped me capture whether they already viewed aspects of their neighborhood from a structural perspective (thus reflecting a sociological view—a focus of that study). This question, in particular, yielded valuable data, some of which was unexpected such as a theme about violence in urban neighborhoods. The idea here is my research questions guided my study’s purpose, while the interview questions’ tone and language made them accessible to the participants.

A researcher may also want to follow the “social rules that apply to ordinary conversation” (Rubin & Rubin, 2012, p. 96). In addition to making interview questions distinct from research questions, a researcher wants to ask participants questions they can answer by virtue of what they know or the time since the incident at hand (Willis, 1999). For instance, question 10 in Table 1 asked students how they made the decision to pursue a college education. Since at the time of the study they were enrolled in college, the question was bounded by a period they could recall.

You also want to ask only one question at a time, try not interrupting participants when they are speaking, indicate understanding through nodding or other gestures, ask clarifying questions, transition from one topic to another, express gratitude, and communicate any intentions to follow up before the interview ends (Rubin & Rubin, 2012). In Table 1, I have included some transitions I used between topics. I also included places where I expressed gratitude such as when I transitioned into asking participants about their decision to attend college, Thank you for your responses. I’d like to now ask you questions regarding your decision to attend college (see Table 1). Lastly, while in a social conversation you may inquire further by asking why, in an interview participants may perceive why questions as judgmental. As the researcher, you want to avoid framing questions from the position of why (Rubin & Rubin, 2012). See question 3 in Table 1 for an example of a why question reframed. Rubin and Rubin (2012) suggest these alternatives to asking why: “What influenced, what caused, what contributed to, and what shaped.” These rules can help you obtain important information while maintaining a conversational tone.

Unlike an ordinary conversation, however, the purpose of an interview is to gain further information relative to the study at hand. You can preserve the conversational and inquiry goals of the research act by including four types of questions: (1) introductory questions, (2) transition questions, (3) key questions, and (4) closing questions (Creswell, 2007; Krueger & Casey, 2009; Merriam, 2009; Rubin & Rubin, 2012). Table 3 explains each type of question and points to examples found in Table 1.

Introductory questions serve to help the researcher begin the interview with easy, non-threatening questions that ask for narrative descriptions. For example, early in student interviews I asked participants about where they grew up (see introductory example in Table 3). This question was non-threatening and provided the participants the opportunity to get used to describing experiences (Patton, 2015). It was also relevant because one’s neighborhood may shape one’s views of social relations, structures, and opportunities. Students’ responses to this question lead me to ask additional questions more central to their upbringing, which provided insights into their existing sociopolitical consciousness. This start to the interview helped set the tone of a conversation, but also distinguished the interview as a form of inquiry.

Transition questions move the interview toward the key questions (Krueger & Casey, 2009) and keep the conversational tone of the interview. In Table 3, I provided an example of a transitional question whereby I referred to the response the student provided in a questionnaire to transition to questions about their first-generation college-going status. Each interview I conducted (first or follow up interviews) had questions transitioning us slowly from
one topic to another. Under each new topic I started with less intrusive questions and slowly worked toward asking questions that were more personal.

**Table 3—Types of Interview Questions**

<table>
<thead>
<tr>
<th>Type of Question</th>
<th>Explanation of Type of Question</th>
<th>Example of Type of Question</th>
</tr>
</thead>
</table>
| Introductory Questions| Questions that are relatively neutral eliciting general and non-intrusive information and that are not threatening | Based on the information that you provided in the questionnaire, you went to high school at ______. Did you grow up in ________?  
*If yes:* Go to question #2  
*If no:* Where did you grow up?  
(see question 1 in Table 1) |
| Transition Questions  | Questions that link the introductory questions to the key questions to be asked                 | In your questionnaire, you said that your ___ (mother, father, or guardian) had a ____ education. Is that correct?  
*If says yes:* Does that mean that you are the first in your family to enroll in college?  
*If says no:* Who else in your family has gone to college?  
(see #9 in Table 1) |
| Key Questions         | Questions that are most related to the research questions and purpose of the study               | What makes you identify with that community?  
(see questions listed under #7 in Table 1) |
| Closing Questions     | Questions that are easy to answer and provide opportunity for closure                            | Before we conclude this interview, is there something about your experience in this college/university that you think influences how you engage in your classes that we have not yet had a chance to discuss?  
(see end of Table 1) |

Key questions, also referred to as main questions, tend to solicit the most valuable information (Krueger & Casey, 2009; Rubin & Rubin, 2012). The practice of identifying key questions provides the researcher with a sense of the core questions to ask in the interview. For example, in the first interview I held with students about their sociopolitical consciousness a key question focused on whether and how they identified with a particular type of community. Once students identified a community, I asked a series of questions to slowly get at the communities with which students identified (see question 5 in Table 1) and eventually asking, *What makes you identify with that community?* The question directly related with my research focus on students’ sociopolitical consciousness as I had defined it for the study. Students’ answers to the series of questions that comprised question 5 (Table 1) was instrumental to my learning of their awareness and understanding of cultures and other social identities, as well as social structures shaping those identities. Students’ responses to question 5 (Table 1) lead to important insights of how students’ identified and why. I was later able to analyze those statements to arrive at a finding about the differences and similarities in students’ sociopolitical consciousness regarding themselves and others.

As an interview ends, a researcher may want to ask easier questions and provide the participant an opportunity to raise any issues not addressed. For instance, I ended the first interview with students as follows: *Before we conclude this interview, is there something about your experience in this college/university that you think influences how you engage in your classes that we have not yet had a chance to discuss?* This question provided the participants
an opportunity to insert information and reflect, but also signaled a conclusion. Another closing question asks participants to give advice: *If you could give advice to another first-generation college student to help them with their transition to college, what would that be?* These sorts of questions help the participants slowly transition out of the interview experience. They may solicit unexpected and valuable responses, but their main purpose is to provide the participant with a reflective, closing experience to the interview. The overall organization of questions (beginning, transitional, key, and closing questions) can shape the interview protocol toward an inquiry-based conversation.

**To support the development of an inquiry-based conversation, a researcher may also draft a script as part of the interview protocol.** A script—written text that guides the interviewer during the interview—supports the aim of a natural conversational style. In writing a script, the researcher considers what the participants needs to know or hear to understand what is happening and where the conversation is going. Developing a script also helps support a smooth transition from one topic to another (Brinkmann & Kvale, 2015; Patton, 2015; Rubin & Rubin, 2012) or one set of questions to another set of questions. A researcher might summarize what they just learned and inform the participant that the conversation is now going in a slightly different direction. For example, between questions 6 and 7 in Table 1 I said, *Thank you for your responses. I'd like to now ask you questions regarding your decision to attend college.*

A researcher may not read the script word-for-word during an actual interview, but developing a script can mentally prepare the researcher for the art of keeping an interview conversational. In part, the script is as much for the researcher (please stop and remember this person needs to know what is happening) as it is for the participants (oh, I see, this person now wants to discuss that part of my life).

**Consider likely follow-up questions and prompts.** As a final feature of preparing an inquiry-based conversation, the researcher may want to also spend time considering the likely follow-up questions and prompts that will help solicit information from the participant. Rubin and Rubin (2012) provide detailed information on types of follow up questions and prompts researchers may want to ask during an interview and their purpose. Essentially, while some follow-up questions and prompts will surface on the spot, a researcher may want to think of some possible follow-up questions likely needed to solicit further detail and depth from participants. Doing so helps the researcher, again, consider the place of the participant and how gently questions need to be asked. By gently I mean that instead of asking someone, “what made you drop out of college?” a researcher may want to slowly build toward that sort of information by asking questions and then follow ups and prompts. For instance, one may instead ask about how long the person was in college, the area of study pursued, what college was like, and then ask how he/she/ze reached the decision not to continue going to college. Consideration of possible follow-ups can help the researcher identify the pace of questioning and how to peel back information one layer at a time.

**Phase 3: Receiving Feedback on the Interview Protocol**

Through phases 1 and 2, the researcher develops an interview protocol that is both conversational and likely to elicit information related to the study’s research questions. The researcher can now work on phase 3—receiving feedback on the developed interview protocol. The purpose of obtaining feedback on the interview protocol is to enhance its reliability—its trustworthiness—as a research instrument. Feedback can provide the researcher with information about how well participants understand the interview questions and whether their understanding is close to what the researcher intends or expects (Patton, 2015). While a variety
of activities may provide feedback on interview protocols, two helpful activities include close reading of the interview protocol and vetting the protocol through a think-aloud activity.

**Table 4— Activity Checklist for Close Reading of Interview Protocol**

Read questions aloud and mark yes or no for each item depending on whether you see that item present in the interview protocol. Provide feedback in the last column for items that can be improved.

<table>
<thead>
<tr>
<th>Aspects of an Interview Protocol</th>
<th>Yes</th>
<th>No</th>
<th>Feedback for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview Protocol Structure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning questions are factual in nature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key questions are majority of the questions and are placed between beginning and ending questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions at the end of interview protocol are reflective and provide participant an opportunity to share closing comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A brief script throughout the interview protocol provides smooth transitions between topic areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviewer closes with expressed gratitude and any intents to stay connected or follow up</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, interview is organized to promote conversational flow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Writing of Interview Questions &amp; Statements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions/statements are free from spelling error(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only one question is asked at a time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most questions ask participants to describe experiences and feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions are mostly open ended</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions are written in a non-judgmental manner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Length of Interview Protocol</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All questions are needed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions/statements are concise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comprehension</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions/statements are devoid of academic language</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions/statements are easy to understand</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A close reading of an interview protocol entails a colleague, research team member, or research assistant examining the protocol for structure, length, writing style, and comprehension (See Table 4 for an example of a guide sheet for proofing an interview protocol). The person doing the close read may want to check that interview questions “promote a positive interaction, keep the flow of the conversation going, and stimulate the subjects to talk about their experiences and feelings. They should be easy to understand, short, and devoid of academic language” (Brinkmann & Kvale, 2015, p. 157). When closely reading over the protocol, researchers ask the people doing the close reading to put themselves in the place of the interviewees in order to anticipate how they may understand the interview questions and respond to them (Maxwell, 2013).

After engaging in a close reading of the protocol, it is important to “get feedback from others on how they think the questions (and interview guide as a whole) will work” (Maxwell, 2013, p. 101). Insight into what participants are thinking as they work through their responses to interview questions can elucidate whether questions are clear, whether interviewees believe they have relevant answers, and whether aspects of questions are vague or confusing and need to be revised (Fowler, 1995; Hurst et al., 2015; Willis, 1999, 2004). To get this feedback from others the researcher can recruit a few volunteers who share similar characteristics to those who will be recruited for the actual study. These volunteers can be asked to think-aloud as they answer the interview questions so the researcher can hear the volunteer response and also ask questions about how the participants arrived at their responses (Fowler, 1995). For example, to see if the question is clear, you could ask: How difficult was it to answer that question? (Willis, 1999). For insight on participants’ thoughts as they answer questions, you could ask: Can you describe what you were thinking about when I used the word, _____? It is important for the researcher to spend time initially orienting participants on the purpose of a think-aloud interview and how it will proceed so that they are not confused about why they are being asked to answer the question as well as describe their thought process (Willis, 1999).

For my study on students’ sociopolitical consciousness, I shared some of the interview questions with a couple of college students currently enrolled in the university where my study took place, but who would not be participants in my study. Likewise, I also sought feedback from faculty with similar teaching backgrounds on my faculty interview protocol. The feedback was immensely helpful toward refining my interview protocols because I had a glimpse of how the questions came across to potential participants and how I could refine them to make them accessible and understandable.

Some studies have such a small sample that obtaining possible volunteers is difficult. In that case, teaching assistants or other students may serve as “practice participants” where they role-play and try to answer the questions as if they were the participants. While it is based on role-play, students in my graduate courses have found it useful to gain hands-on practice obtaining and providing feedback on interview protocols through peer review whereby peers engage in close reading of each other’s interview protocols and think-aloud activities. Students have expressed that the feedback is useful for refining their interview protocols because they gain a better sense of what is unclear or confusing for others. They use those insights to refine the interview protocol, thus enhancing its quality and trustworthiness.

This process of getting feedback from multiple sources aligns with the iterative nature of qualitative research whereby the researcher is seeking information, feedback, and closely listening for ways to continuously improve interviews to increase alignment with participants’ experiences and solicit relevant information for the study (Hurst et al., 2015). Further, this process of obtaining feedback can be done in the beginning of study, but can also be a helpful guide as a qualitative researcher tweaks questions once in the field. Obtaining feedback on interview questions may be one way for a researcher to check on how his/her/zer evolving questions will be heard and therefore responded to by participants. Hurst et al. (2015) pointed
to the possible value of this process for qualitative research: “Projects that neglect pretesting run the risk of later collecting invalid and incomplete data. But, completing a pretest successfully is not a guarantee of the success of the formal data collection for the study” (p. 57).

Phase 4: Piloting the Interview Protocol

After the three previous phases, the researcher has developed an interview protocol aligned with the study’s purpose, the questioning route is conversational in nature, but also inquiry-driven. The researcher has examined each question for clarity, simplicity, and answerability. The researcher has also received feedback on the questions through close reading of the protocol and think-aloud activities. At this point, the researcher is ready to pilot the refined interview protocol with people who mirror the characteristics of the sample to be interviewed for the actual study (Maxwell, 2013).

Distinct from phase 3, in phase 4 the researcher is simulating the actual interview in as real conditions as possible. Any notes taken toward improving the interview protocol are based on the interviewer’s experience of conducting the interview and not from an inquiry of the interviewee’s thought process. Merriam (2009) pointed out that the “best way to tell whether the order of your questions works or not is to try it out in a pilot interview” (p. 104). In this step, the interviewer conducts interviews simulating rapport, process, consent, space, recording, and timing in order to “try out” the research instrument (Baker, 1994). Through piloting, the researcher aims to get a realistic sense of how long the interview takes and whether participants indeed are able to answer questions. In phase 4, you take note of what might be improved, make final revisions to interview protocols, and prepare to launch the study (Maxwell, 2013). Some researchers may not have the time, money, or access to participants to engage in a piloting phase. In that case, phase 3 (feedback) becomes even more crucial to refining the interview protocol.

The Interview Protocol Refinement Framework

The interview protocol refinement framework (IPR) is comprised of four phases to systematically develop and refine an interview protocol, to the extent possible, before data collection (see Table 5). I developed these phases based on integration of the existing literature and my own experience teaching and conducting qualitative research. Phase 1 entails the researcher creating an interview protocol matrix to map the interview questions against the research questions to ensure their alignment. In phase 2, the researcher balances inquiry with conversation by carefully wording and organizing questions so they are clear, short, understandable, and in a conversational order. Phase 3 involves researchers obtaining feedback on their interview protocol through close reading and think-aloud activities. The feedback gained through these activities can provide the researcher an opportunity to fine-tune the interview protocol. Lastly, phase 4 is the piloting stage. In phase 4 the researcher has a small sample of people who share similar characteristics with the study sample and carries out interviews under real conditions. Here the researcher has a final opportunity to see how the interview protocol functions live before conducting the actual study. This last phase, however, is not possible for all researchers given other constraints (i.e., time, money, access).

While all four phases together comprise the IPR framework, some researchers may only be able to carry out phases 1-3. In such cases, those researchers have taken important steps to increase the reliability of their interview protocol as a research instrument and can speak to that effort in their IRB applications as well as any presentations or publications that may result from their research. The IPR framework makes transparent the effort and intentionality required
from researchers for developing effective interview protocols. IPR can be used by novice researchers as well as researchers that are more experienced because it supports the aim to garner rich and productive data to answer pressing research questions across a variety of fields.

### Table 5—Interview Protocol Refinement (IPR) Method

<table>
<thead>
<tr>
<th>Phase</th>
<th>Purpose of Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I: Ensuring interview questions align with research questions</td>
<td>To create an interview protocol matrix to map the interview questions against the research questions</td>
</tr>
<tr>
<td>Phase 2: Constructing an inquiry-based conversation</td>
<td>To construct an interview protocol that balances inquiry with conversation</td>
</tr>
<tr>
<td>Phase 3: Receiving feedback on interview protocol</td>
<td>To obtain feedback on interview protocol (possible activities include close reading and think-aloud activities)</td>
</tr>
<tr>
<td>Phase 4: Piloting the interview protocol</td>
<td>To pilot the interview protocol with small sample</td>
</tr>
</tbody>
</table>

Although the IPR framework can support researchers’ efforts to have well-vetted and refined interview protocols, it does not mean that a researcher cannot “unhook” from the interview protocol (Merriam, 2009, pp. 103-104). The interview protocol is a research instrument, but in qualitative research, the most useful instrument is the researcher. He/she/ze can listen carefully and adjust, change paths, and otherwise follow intuition in a way that his/her/zer protocol will never be able to do. Yet, by following the IPR framework, even if some departure occurs in the field, the researcher will be more prepared (cognitively) to follow intuition and yet, still have a map in their minds of the sorts of questions they hope to ask.

As such, the IPR framework can support the evolving nature of qualitative research that often requires the researcher to be responsive to the data that emerges and possibly calling for flexibility and openness to change.

The IPR framework is promising because it does not prohibit change, flexibility, or openness. Rather, the IPR framework supports the development and refinement of interview protocols whether at the beginning stage or throughout the life of a research project. It is important to note that changes in interview protocols and even in research questions are sometimes necessary in qualitative research. Nonetheless, changes that occur in the field require careful thought. Interview questions developed in the field can solicit rich data when they maintain congruence with any changes in the research questions (Jones et al., 2014). As such, the IPR framework offers the researcher support to fine-tune an interview protocol and ensure, to the extent possible, a well-developed instrument to engage in interview research.

### References


**Author Note**

Milagros Castillo-Montoya is assistant professor in the department of educational leadership in the Neag School of Education at the University of Connecticut. Her research focuses on teaching and learning in higher education with particular attention to classrooms diverse by race, ethnicity, and social class. She also teaches courses on research and assessment, specializing in qualitative methodologies with expertise in classroom observations and interview research. Correspondence regarding this article can be addressed directly to: milagros.castillo-montoya@uconn.edu.

Copyright 2016: Milagros Castillo-Montoya and Nova Southeastern University.

**Acknowledgements**

Thank you to the graduate students in Assessment, Evaluation, and Research in Student Affairs, Blanca Rincón, Sarah Woulfin, and Robin Grenier for valuable input on this manuscript.
Article Citation