



# **Cognitive Interviews for the Wyoming Department of Employment: Testing a Job Skills Questionnaire**

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# Cognitive Interviews for the Wyoming Department of Employment: Testing a Job Skills Questionnaire

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# Cognitive Interviews for the Wyoming Department of Employment: testing a Job Skills Questionnaire

## 1. Introduction

The Wyoming Department of Employment (WDOE), Research and Planning Section, enlisted the Wyoming Survey & Analysis Center (WYSAC) to conduct ten cognitive interviews at various locations throughout the state of Wyoming. The goal of these interviews was to test how well the questions included in the Job Skills survey perform in achieving the intended purpose of this instrument, which is to be used by the WDOE in the future; namely, to effectively yield the information necessary to help educators and employment training organizations identify necessary skills and develop curriculum to forge these skills in the labor pool.

## 2. Project Overview

Requirements for the project as laid out by the WDOE included that WYSAC conduct on-site, face-to-face interviews with ten Wyoming employers, chosen to represent a variety of business/employer types. To ensure some measure of representativeness throughout the state, it was suggested that WYSAC interview employers located in Laramie, Cheyenne, Casper, and Rock Springs. Also required was that at least five of the employers have at least 50 employees. Recruitment began in March, 2010 with these specific requirements in mind, and continued throughout the course of the project.

WYSAC and the WDOE worked collaboratively to develop a list of target industries during recruitment in order to achieve a sample of employers most representative of the likely employer pool from which the WDOE would draw for their future data collection efforts. It was concluded that WYSAC should target at least one construction company as well as one retailer of fewer than 10 employees. Also needed was a large construction company (more than 50 employees), as well as employers in the education and healthcare fields.

A total of 10 cognitive interviews were conducted from March 31 to April 16, 2010. Among the cities and towns included were those set forth in the original interviewing plan: Laramie (two interviews), Cheyenne (two interviews), Casper (two interviews), and Rock Springs (one interview). WYSAC was also able to secure interviews in two other Wyoming cities: Gillette and Rawlins, with a single interview conducted in each.

The firms chosen represented a variety of industries and sizes, including:

- A software/database company with 15 employees;
- a hospital with around 150 employees;
- a hotel/conference center with around 155 employees;

- a school district with around 2,400 employees;
- a trucking company with 4 employees;
- an energy co-op with 164 employees;
- a printing company with 15 employees;
- a construction company with 110 employees;
- an educational facility with 250 employees;
- a construction supply company with 4 employees.

The employer representatives interviewed from each company were involved in hiring, maintaining employee records, and, in some cases, supervision of newly-hired workers. It was not uncommon for those in small companies to have several roles, many of which were appropriate for participation in the cognitive interview. Regardless of title or precise occupational description, all company representatives involved in this project acknowledged that they would be the likely recipient of WDOE correspondence such as the materials included in this study.

### 3. Methods

#### 3.1. Recruitment

Recruitment phone calls to a variety of Wyoming employers for the cognitive interviews were directed to Human Resources Departments, if available, and otherwise to individuals within the businesses who are involved with hiring and/or employee records. Participation in the interview process was requested and scheduled once contact was secured with the employer representative most likely to read and interpret cover letters, and to ensure the completion and return of the Job Skills questionnaire to the WDOE.

#### 3.2. Data Collection

Data collection for the project included face-to-face cognitive interviews conducted by Michael Dorssom and Thomas Furgeson, both WYSAC research scientists. The interview process included written notes compiled during each interview. Per interview, one person would conduct the interview while the other took notes, although the interviewer also took notes whenever possible. Signed informed consent was secured from the interviewee before each interview. Informed consent included an explanation to the respondent that their participation is voluntary and that their responses are confidential.

#### 3.3. Cognitive Interviewing and Guide Development

Cognitive interviewing for this project involved procedures designed to delve into the cognitive processes that underlie the comprehension of and production of answers to items on the questionnaire and accompanying materials. Because of the complexity of the themes explored, and because the interviews were conducted as a psychologically-oriented method for empirically studying the ways in which respondents *mentally process and respond* to the material, there was a departure from the traditional question-answer sequence normally found in face-to-face interviewing. Most guidelines for cognitive interviewing are built on one of two distinct paradigms: the Think Aloud (Non-Intervening) model; or, alternatively, the Probing model.

### 3.3.1. Think Aloud

In its purest form, the procedure for using the Think Aloud method of cognitive interviewing calls for the interviewer to instruct the respondent to report what they are thinking as they answer survey questions or “experience” the materials, and only intervene to remind the respondent to continue thinking aloud. Data collected by these verbal reports can be useful in yielding “information about how participants tend to retrieve memories,” which can be “used to develop questions that reflect these retrieval strategies” (Beatty and Willis, 2007, p. 290). Such data are limited, however, when the researcher is interested in more robust elements of questionnaire and question design.

### 3.3.2. Probing

Another procedure used in cognitive interviewing is to ask direct questions of the interviewee to explore the survey response process. The probing-based paradigm allows for a wider variety of data to be collected, specifically regarding respondent elaborations on how they obtained answers. Using probes is helpful in generating “verbal material that questionnaire designers find useful, but may not emerge unless a cognitive interviewer specifically asks for it” (Beatty and Willis, 2007, p. 294).

WYSAC used a combination of the Think Aloud and Probing methods of cognitive interviewing for this project. This hybrid approach allowed us to collect the most useful data for analyzing whether the questionnaire, in its current form, would yield data sufficient for the goals of the WDOE. The following table presents probes developed in accordance with literature provided to WYSAC by the WDOE. A four stage process was used to evaluate a question’s performance. The source literature can be found as Appendix 7.5 to this report.

**Table 1. Question-Response Process Area and Possible Probes**

Question-Response Process Area	Possible Probe
Comprehension	<ul style="list-style-type: none"> <li>• As you read the question (and answer choices), are there any terms you don’t understand?</li> <li>• Are there any concepts that are ambiguous?</li> <li>• How do you feel about the length and/or complexity of the question?</li> </ul>
Retrieval	<ul style="list-style-type: none"> <li>• When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>
Judgment	<ul style="list-style-type: none"> <li>• Is the question too sensitive for you to feel comfortable answering?</li> <li>• Is it hard to make an estimate about xxx?</li> </ul>
Response	<ul style="list-style-type: none"> <li>• Do you feel that the answer choices are complete?</li> <li>• Would you ask this question differently?</li> </ul>

If the cognitive interview process staggered, the above probes helped to keep the interview moving forward in the most helpful direction.

### 3.3.3. Interviewer Guide

In order to stay consistent with the intent of the cognitive interviews from one interview to the next, both interviewers used a cognitive interview guide during the process as a means to organize notes and to have access to the probes for each item. The guide itself was developed in accordance with the dual paradigm approach to cognitive interviewing, using both Think Aloud and Probing techniques as described above.

The interviewer guide document (Appendix 7.4) is made of a “Tips and Keys to Success” section, a warm-up section, and the main body of the interview divided into sections according to the individual elements of the questionnaire. The tips and keys to success that are offered to the interviewer instruct on the basics of Think Aloud and Probing techniques, mostly as a reminder to the interviewer to follow specific protocols for interviewing.

The warm-up instructs the interviewer on how to introduce *thinking aloud* to the interviewee. WYSAC designed a warm-up question to ease the interviewee into the idea of saying out loud what they are thinking as they mentally process or visualize a simple problem (in this case, the respondent was asked to visualize and count the number of windows in their home, and to verbally describe their experience in doing so).

Finally, the design of the main body of the interviewer guide includes a section each for the cover letter, questionnaire (and each question), and the reminder letter. For each section within the main body of the guide, there is space for written notes, as well as probes that can be used during the interview.

## 4. Key Findings

This section addresses the input that was received from Wyoming businesses about the specific survey items—namely, a cover letter, a survey instrument (questionnaire), and a reminder letter—that the Wyoming Department of Employment plans to use in the future to collect employment data. In the cases of the cover letter and reminder letter, input about each, as a whole, is synopsized. For the survey instrument, each survey element (e.g., question, data entry field) is treated separately. For all items, specific issues and input are presented immediately below each item, and these are followed by our recommendations, if applicable, for possible improvement to the item.

Special attention has been paid to the items of the questionnaire that specifically address the importance of job skills. Questions 6 through 11 ask the respondent to rate a series of job skills as to their importance for a specific job. The WDOE is especially interested in whether these questions will yield information to assist educators and employment training organizations identify critical skills and develop informed curricula, which in turn will help employers to access the skilled labor essential to their businesses. Following the treatment of each item in this section is a separate section devoted to these specific “job skills” questions.



## 4.1. Item 1: Cover letter

For this item, respondents were handed the cover letter and asked about their overall, initial impression prior to actually reading the letter. In short, when the cover letter was presented, employers were asked to *not* read the letter but to first glance at it and state their initial impression or impressions. Respondents were then asked to read the letter and offer their thoughts and impressions about the letter's content. When necessary, probes were used to help guide the respondent to elaborate on their thoughts regarding comprehension, retrieval, judgment, and response.

### 4.1.1. Initial Impressions: Cover Letter, unread

Most respondents stated that their initial thoughts as they viewed the cover letter were that it looked official, authoritative, and important (see Appendix 7.1). Several mentioned that the seal, letterhead, and that the letter is from the Department of Employment caused them to impute importance to the letter; these impressions lent the letter a certain gravity that requires attention (a few respondents stated that correspondence from the WDOE is often received with some apprehension, as it often involves claim issues). Some mentioned specifically that anything from “the feds” or from a state agency deserves attention. The general attitude was that the letter would likely be read immediately or would be provided to the most appropriate person as soon as possible.

At least one respondent had a strong reaction to the quality of the letterhead; we attribute this to a possibly less-than-polished copy of the cover letter presented to the individual. However, it is important to note that quality of presentation is important and could affect compliance.

While many respondents did say that they would immediately read the letter, some mentioned that they may set it aside and read it later, or read it only when reminded. This, it is our impression, is due to the perceived length of the letter. Many explicitly mentioned that the letter appears lengthy and would require much up-front time to read (variously described as “long,” “too much to read if a lot else to do,” and “busy”). Others mentioned, again for reasons of length, that they would be more likely to skim the letter rather than read it outright, and some said they would skim the letter while simultaneously looking at the questionnaire for reference. Several respondents did say specifically that the letter should be shortened and crafted to address only the most germane issues about the data collection effort.

Another issue about the cover letter that presented itself with some frequency is whether participation in the survey is voluntary or mandatory, with some saying that this is the first question they would seek to answer. Based upon this, it is our impression that the voluntary nature of the data collection effort will decrease participation; one participant flatly stated that, as soon as it was clear from the letter that this is a voluntary effort, the material would be discarded right away.

### 4.1.2. Cover Letter, read

Almost all respondents answered affirmatively to each of the following about the content of the cover letter: that the *survey's purpose* is clear; that the *instructions for the questionnaire* are clear; that *confidentiality is assured*; and that *appropriate contact information is provided* for any questions that may arise.

Overall, therefore, the cover letter delivers on the general criteria for effectively conveying the purpose of the effort, and how to submit the data and who to contact with questions. Several observations were otherwise made, however, and these include:

- Regarding the opening paragraph: it could be more clearly worded, more to the point about the purpose of the project, and could mention the survey right away. At least one respondent stated that the first sentence was awkward in that it “jumped right in” to a description of the project and was not a smooth introduction.
- As was offered as a general impression of the cover letter prior to reading, some respondents said that the letter was long and could be shorter in general; some also stated that the language could be simpler (i.e., simpler words and simpler expressions could be used).
- One respondent stated that the deadline for returning the survey was intimidating and might increase reluctance to complete the questionnaire. Another stated that the phrase “inform future policy choices” is awkward and unclear.
- Several respondents stated that they appreciated the number of options for returning the questionnaire, and some also indicated that the statement about random selection increased their sense of obligation to participate.
- A suggestion was made to use bold type for methods of questionnaire return and for the deadline.
- Many respondents expressed dislike for the listing of the Workforce Investment Act statute number, describing it variously as “busy,” “cumbersome,” “heavy-handed,” and “unnecessary” (the statute also needs appropriate section mark).

#### 4.1.3. Recommendations, Cover Letter

Based on respondent input, the general recommendations for the cover letter are that it be shortened, simplified, and that items of importance be emphasized.

On the first point (*shortened*), it was our observation that many respondents felt that a briefer statement of purpose is in order for the first paragraph, and that the final paragraph could also be more concisely expressed; a specific recommendation was to drop the specific statute citation. On the second point (*simplified*), we observed that many felt that the level of language was somewhat off-putting, and perhaps edging toward pompous (a cited example is the first sentence of the final paragraph: “...broadly distributed to facilitate discussions among members of the community...”). Much of the language seems to lend itself to simplification. On the final point—that certain information be emphasized—participants seemed to want to be able to discern the necessary and important information as rapidly as possible; specific recommendations are to emphasize methods of submission, the due date, and the voluntary nature of the effort.

Participants universally expressed concern about their busy schedules, and how important it is that communications be efficient. The above recommendations may increase the efficiency and

effectiveness of communicating the WDOE's project, and may increase compliance with the effort. One final observation worth noting—and offered by a participant—is that recipients of the cover letter will simultaneously be handling the questionnaire; having both in hand may make exhaustive detail in the cover letter unnecessary, as the questionnaire itself will serve as a prop to inform them about the effort.

## 4.2. Item 2: Questionnaire

For this item, respondents were handed the survey questionnaire (Appendix 7.2) and asked about their overall, initial impression prior to actually reading the questionnaire. In short, when the questionnaire was presented, employers were asked to *not* read it but to first glance at it and state their initial impression or impressions. Respondents were then asked to go through the questionnaire item-by-item and offer their thoughts and impressions about each item. When necessary, probes were used to help guide the respondent to elaborate on their thoughts regarding comprehension, retrieval, judgment, and response.

### 4.2.1. Initial Impressions: Questionnaire, unread


Most respondents indicated that their first impression was that the survey questionnaire looked simple, unthreatening, short, and probably easy to complete. Among these respondents, the overall impression was that it looked well organized and well laid out, and several specifically mentioned drawing some comfort from the stated estimate of a ten-minute completion time. However, a minority took a completely different view of the questionnaire and said that it looked lengthy, complicated, and thought completing it would take a long time.

Specific suggestions from respondents based on the initial exposure to the questionnaire include: use of color in the seal and in the shaded answer areas; and reducing the length of the instructions text. One respondent expressed that the “Research & Planning” logo is unfamiliar, does not necessarily tie in with the WDOE, and gives some pause as to the purpose of the project. More than one respondent said they would like to see—and would more likely respond to—an online version of the questionnaire.

#### 4.2.2. Questionnaire, individual items

##### *Introduction/ instructions preceding question #1*

Figure A: Instructions prior to question 1

<b>Department of Employment Job Skills Survey – Fax to 1-800-888-8888 or 307-473-3863</b>		<i>Rev. 2/2010</i>
	Wyoming Department of Employment Research & Planning P.O. Box 2760 Casper, WY 82602 Tel. (800) 888-8888 <a href="http://doe.state.wy.us/LMI/">http://doe.state.wy.us/LMI/</a>	Survey Date: April 2010 <b>Please return form by May 14, 2010</b>
	<b>[indicates merge field]</b>	<b>We expect this form to take no more than 10 minutes to complete</b> [EmployerID] [JJ7824.32]
<p><b>All data collected by Research &amp; Planning must, by the Workforce Investment Act (see: 29 USC sec. 491-2 (a)(2)) and the Wyoming Employment Security Law (section 27-3-603), be held in the strictest confidence, with results published only as summary statistics. The information you provide to us will be held confidential to the extent permitted by law.</b></p>		
Employee holding this job: [J. Jones]xxx-xx-[2602]		Total pay during reference quarter: \$[7824.32]
<b>This is a request for information about this job: work, pay, and benefits</b>		

Upon reading the introduction section to the questionnaire, the overwhelming majority of respondents stated that the section is clear with regard to the questionnaire's purpose, what is to be done, that confidentiality is assured, and that the contact information is complete.

This being said, most respondents expressed dissatisfaction of some sort with this section. The most general remark was that the information was redundant to that already conveyed by the cover letter, and that much of it seems unnecessary. Regarding of formatting, some thought that the text is crowded and that information gets easily lost, visually (specifically mentioned is the due date; it was suggested that this be enlarged and or also placed in the footer of the first page). Also, it was stated by at least one respondent that the continued mention of confidentiality begins to make the subject intimidating and, again, it was stated that the statute citation seems unnecessary.

Two specific observations by respondents are of note for this item. First, one respondent stated that there appears to be a contradiction between the cover letter stating that the *business* was randomly selected, while the introduction in this section of a specific employee suggests that it was an *employee* that was randomly selected. To this respondent, this is a contradiction that calls into question the veracity of the cover letter. Second, the explicit printing in this section of the employee's social security number made one respondent concerned enough about confidentiality that he said he would discontinue participating in the survey.

##### *Question #1*

Figure B: Question 1

<p>1. The State of Wyoming's Unemployment Insurance database indicates the above-named individual was an employee of your business during some or all of the months of October, November, and/or December of 2009. Is this correct?</p>	
<input type="checkbox"/> Yes ( <i>if yes, please continue</i> )	<input type="checkbox"/> No ( <i>if no, STOP. Please return this form in the enclosed self-addressed stamped envelope or fax it to one of the numbers above. Thank you.</i> )

Notable general impressions conveyed by respondents about question 1 were that it is clear and that the required information is likely to be easily retrieved. Overall, our observations were that no

participant had any difficulty navigating this question. Some did pause upon reading it and shared the following: the introduction to the question (namely, the explanation about where the employee data come from) is lengthy and unnecessary; the request for personal information gives one pause; the impression created by mention of the Unemployment Insurance database creates the impression that the referenced employee is no longer employed; and that the actual question (“Is this correct?”) gets lost among the rest of the text and should be emphasized (e.g., bolded, capitalized).

### Question #2a

Figure C: Question 2a

<p><b>2a.</b> What was this worker's rate of pay as of November 12, 2009?      \$ _____ per      <b>(check one)</b></p> <p>Please include base rate of pay, tips, commissions, and other monetary compensation. If the worker was not employed as of November 12, 2009, please report his or her last pay rate in October, November, or December 2009.</p>	<p><input type="checkbox"/> Hour</p> <p><input type="checkbox"/> Week</p> <p><input type="checkbox"/> 2 Weeks</p> <p><input type="checkbox"/> Month</p> <p><input type="checkbox"/> Other (<i>specify: e.g. supplemental insurance</i>) _____</p>
--	---

Most participants appeared to have no overt difficulty with this question, and most stated that they found the question simple, and straightforward, and that the information would likely be easily retrieved. At least a few respondents stated that they did have to read the question more than once, and stated that the reason was specific date mentioned; in short, the data content of the question—rate of pay—was easily comprehended—but the attachment of that data element to a specific date caused some pause. One of these participants indicated that the questionnaire would likely be passed off due to this level of specificity. Several participants identified the following issue with the question: “rate of pay” generally means one fixed amount to them, but the required inclusion of “tips, commissions...”, etc. means something different (one mentioned that *bonuses* are not included, but are considered income, as well), often fluctuate in amount, and are therefore difficult to precisely calculate.

### Question #2b

Figure D: Question 2b

<p><b>2b.</b> On average, how many hours did this employee normally work each week at that time?      _____ Hours</p>
---

All participants reacted favorably to this question and indicated that it is straightforward, simple, and easily retrieved.

### Question #3

Figure E: Question 3

<b>3. Were any of the following benefits offered to the worker? (Please check all that apply)</b>		
<input type="checkbox"/> Health insurance	<input type="checkbox"/> Retirement plan	<input type="checkbox"/> Paid time off
<input type="checkbox"/> Other (specify): _____	<input type="checkbox"/> No benefits offered	

Most participants had no problems comprehending this question, and all indicated that the information would be easily retrievable. Regarding the answer choices: while all participants gave the impression that they were easily understood and that they would have no difficulty answering, many suggested that either, 1) the “other” answer space be substantially expanded or, 2) that the specific answer choices be expanded to include: dental; vehicle allowances; vision; and perhaps that the “Paid time off” category be expanded to differentiate between vacation time and sick time (or specifically state that it is inclusive of both).

### Question #4a

Figure F: Question 4a

<b>Type of Work</b>										
4a. On November 12, 2009, what was this worker's occupation ( <i>For example, secretary, accountant, personnel manager. Please print in the shaded spaces.</i> )										

Though all participants seemed to have no difficulty or issues with reading or comprehending this question on their first pass, we observed that they reconsidered the question when contemplating what to enter in the answer fields. When asked, some stated that the term, “occupation” is not exactly clear, and wondered aloud if “title” or “job description” might be more appropriate. One participant asked if this was requiring a description of the job, rather than the name of the job. It appears somewhat vague to some participants. Regarding the answer field, some described them as unattractive; cumbersome (would prefer to write the response freehand than each letter to a box); and that the field may not be lengthy enough if a description is what is required.

### Question #4b

Figure G: Question 4b

4b. On November 12, 2009, what were this worker's most important activities or duties? ( <i>For example, typing and filing, reconciling financial records, directing hiring policies. Please print in the shaded spaces.</i> )										

As with the previous question, most participants seemed to read this through smoothly and with apparent ease; few made comments other than that it is easily comprehended. Also similar to the prior question, though, is that when contemplating their answers, many referred back to the phrase “most important” in the question and seemed to need clarification. One participant observed that “most important” and “main” may not be one and the same (the example offered was that while a

“main” duty may be to pass an item from one place to another, but that the “most important” duty might be to be sure the person to whom it’s being passed is aware it’s coming; perhaps a hair-splitting distinction, but one that this participant cited as important). A definition of “most important” was requested. At least one participant suggested that this is redundant to the occupation question (if that one is descriptive and not a title), and another stated that these activities/duties would be difficult to hierarchize for many positions and that, at any rate, the answer space is inadequate.

### Question #5

Figure H: Question 5

<b>5. Check the qualifications required for the type of work described in questions 4a and 4b. (Please check all that apply)</b>		
<input type="checkbox"/> On-the-job training	<input type="checkbox"/> Associate's degree	<input type="checkbox"/> None required
<input type="checkbox"/> Postsecondary technical training	<input type="checkbox"/> Bachelor's degree or greater	<input type="checkbox"/> Other ( <i>specify; for example, a course in medical terminology</i> )
<input type="checkbox"/> Work experience in related occupations	<input type="checkbox"/> Licensure or certification	_____

To a person, participants found this question straightforward and had little to offer by way of comments. Suggested additions to the list of check-boxes are “High School diploma or GED,” and “Experience equivalent to education.” One participant felt very strongly that the example provided for the “Other” check-box was more confusing than helpful.

### Introduction/ instructions preceding question #6 (page 2)

Figure I: Introduction/instructions preceding question 6 (page 2)

<b>Employee Skills</b>	[JJ7824.32]
We are seeking information about how important the following skills are for the <b>job</b> in which the worker was employed on November 12, 2009. When possible, we request that the individual's direct supervisor complete all parts of questions 6 through 14. <b>Please use a scale of 1 to 5 where 1 means Very Unimportant and 5 means Very Important. Please circle or check the most appropriate response for this job. Thank you.</b>	

This presented itself as one of the more problematic items in the questionnaire. While we observed few participants having trouble getting through or comprehending it (though one described it as “busy and confusing”) the information contained in this section gave rise to several immediate concerns. All of these concerns centered on the request that the questionnaire be passed along to a supervisor for the certain series of questions.

The main issue cited was that passing the paperwork along to other hands would: be difficult to arrange and inconvenient; shift the importance for immediate completion from high to low; substantially reduce the likelihood that the questionnaire would be returned to them or to WDOE; create confidentiality issues since the personal information would now be possibly passing through several hands (interdepartmental mail was mentioned); and would create logistical problems in coordinating mailing or otherwise returning the questionnaire.

The second issue of major concern was that passing the questionnaire off to a supervisor called into question the veracity of the “10-minute” completion time cited in the questionnaire introduction. Some called this a “contradiction,” a “red flag,” a “surprise,” and a “bait-and-switch.” All expressed

disbelief that the questionnaire could be completed in ten minutes when they encountered this section.

Most participants were very frank that they would *not* pass the questionnaire on to a supervisor, but would either attempt to answer all of the questions themselves or leave those questions blank.

**For the following seven questions (question 6 through question 12), comments about the answer choices apply equally to each question; these comments follow all other commentary and are marked with an asterisk (\*). Of these universal comments, perhaps the most important is that all of these items would receive a rating of no less than “4” (“Important”), suggesting that the data yield would be questionable.**

### Question #6

Figure J: Question 6

6. How would you rate the level of importance for <b>reading comprehension</b> for this job? (Involves understanding written sentences and paragraphs in work related documents.)					
Very Unimportant 1	Unimportant 2	Neither Important nor Unimportant 3	Important 4	Very Important 5	<input type="checkbox"/> Don't know

This question seemed to be very straightforward and clear to all participants. One point of confusion mentioned by more than one participant is that the heading for this section/page of the questionnaire is, “Employee Skills,” but that the questions immediately start off asking about the job, not the employee. Suggestion is that “this job” could be bolded.

\*Suggestion by participant: Answer choices should be on a scale of “most” to “least,” because having “Very” at each end is confusing.

\* Suggestion by participants: The answer choices are too finely defined (i.e., it is difficult to discriminate between “Important” and “Very important” for many of these items.

\* Most participants: There would never be a job for which this item would ever rate below a “4.”

### Question #7

Figure K: Question 7

7. How would you rate the level of importance for <b>coordination</b> ? (Involves adjusting actions in relation to coworkers' actions.)					
Very Unimportant 1	Unimportant 2	Neither Important nor Unimportant 3	Important 4	Very Important 5	<input type="checkbox"/> Don't know

Of all Job Skills questions, this one resulted in the highest numbers of observations by us of confusion on the part of participants. We observed that they often read, then re-read the question; almost invariably they then asked what is meant by the term “coordination.” Many initially interpreted this as physical coordination, and many also stated that the parenthetical definition did little to clarify the term. Some suggested, “adaptability,” or team-oriented terms. With very few exceptions, participants found the term “coordination” confusing and unclear.



\*Suggestion by participant: Answer choices should be on a scale of “most” to “least,” because having “Very” at each end is confusing.

\* Suggestion by participants: The answer choices are too finely defined (i.e., it is difficult to discriminate between “Important” and “Very important” for many of these items.

\* Most participants: There would never be a job for which this item would ever rate below a “4.”

### Question #8

Figure L: Question 8

8. How would you rate the level of importance for <b>critical thinking</b> for this job? (Involves using logic and reasoning to identify the strengths and weaknesses of alternative solutions or approaches to problems.)					
Very Unimportant 1	Unimportant 2	Neither Important nor Unimportant 3	Important 4	Very Important 5	<input type="checkbox"/> Don't know

This question was universally well-received. All participants read through smoothly with no indications or comments that they had any difficulty comprehending the question.

\*Suggestion by participant: Answer choices should be on a scale of “most” to “least,” because having “Very” at each end is confusing.

\* Suggestion by participants: The answer choices are too finely defined (i.e., it is difficult to discriminate between “Important” and “Very important” for many of these items.

\* Most participants: There would never be a job for which this item would ever rate below a “4.”

### Question #9

Figure M: Question 9

9. How would you rate the level of importance of <b>active listening</b> for this job? (Involves giving full attention to what other people are saying and taking time to understand the points being made.)					
Very Unimportant 1	Unimportant 2	Neither Important nor Unimportant 3	Important 4	Very Important 5	<input type="checkbox"/> Don't know

As with the preceding question, this question was universally well-received, and all of observations indicate ease of comprehension.

\*Suggestion by participant: Answer choices should be on a scale of “most” to “least,” because having “Very” at each end is confusing.

\* Suggestion by participants: The answer choices are too finely defined (i.e., it is difficult to discriminate between “Important” and “Very important” for many of these items.

\* Most participants: There would never be a job for which this item would ever rate below a “4.”

### Question #10

Figure N: Question 10

10. How would you rate the level of importance of <b>active learning</b> for this job? (Involves understanding the implications of new information for both current and future problem solving and decision making.)					
Very Unimportant 1	Unimportant 2	Neither Important nor Unimportant 3	Important 4	Very Important 5	<input type="checkbox"/> Don't know

With this question, we observed that several participants had to read the question more than once. Several stated that the parenthetical definition was necessary to understand the term, though at least one participant found the language of the definition to be unnecessarily “highbrow.”

\*Suggestion by participant: Answer choices should be on a scale of “most” to “least,” because having “Very” at each end is confusing.

\* Suggestion by participants: The answer choices are too finely defined (i.e., it is difficult to discriminate between “Important” and “Very important” for many of these items.

\* Most participants: There would never be a job for which this item would ever rate below a “4.”

### Question #11

Figure O: Question 11

11. How would you rate the level of importance of <b>learning strategies</b> for this job? (Involves selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.)					
Very Unimportant 1	Unimportant 2	Neither Important nor Unimportant 3	Important 4	Very Important 5	<input type="checkbox"/> Don't know

While most participants were observed to read through this question without discernible difficulty, and few mentioned more than it is clear and easily understood, some did have issues with this item. Those that did need the parenthetical definition to understand the term stated that it helped only a little and could be stated in clearer language. At least two participants questioned whether this item is materially different from the previous question (“active learning”).

\*Suggestion by participant: Answer choices should be on a scale of “most” to “least,” because having “Very” at each end is confusing.

\* Suggestion by participants: The answer choices are too finely defined (i.e., it is difficult to discriminate between “Important” and “Very important” for many of these items.

\* Most participants: There would never be a job for which this item would ever rate below a “4.”

### Question #12

Figure P: Question 12

12. How would you rate your overall satisfaction with the employee's <i>work skills</i> ? (for example, cooking, customer service skills.)					
Very Unimportant	Unimportant	Neither Important nor Unimportant	Important	Very Important	<input type="checkbox"/> Don't know
1	2	3	4	5	

It was observed that participants initially read through this question easily, but nearly all expressed having problems with the question and answer choices. First, the scale was noted by several participants to be incongruent with the question (the question asks for a satisfaction rating, but the scale is an importance scale). The concerns about this question that were expressed by participants have to do with confidentiality and clarity of the question.

Regarding the former (confidentiality): many stated that this is too personal and too sensitive a question, since it is asking directly about an assessment of the employee's quality. Many also stated outright that they would not answer this question. Regarding the latter (clarity): some stated that the term "work skills" is unclear, even with the parenthetical definition. More importantly, perhaps, is that several participants were confused by the question itself, and stated they were unsure what was being asked. The question asks the respondent to rate their own satisfaction with an employee's skills. It was suggested that this would be far clearer (if indeed this is what is being asked) if the question was phrased more plainly (e.g., "What is your level of satisfaction with...?"). As written, this question confused many participants.

Also unclear to one participant was whether this question was about the employee's skills, or how the employee uses the skills. Further, it was noted that this question is another shift back to the individual after a string of questions about the position.

\*Suggestion by participant: Answer choices should be on a scale of "most" to "least," because having "Very" at each end is confusing.

\* Suggestion by participants: The answer choices are too finely defined (i.e., it is difficult to discriminate between "Important" and "Very important" for many of these items.

\* Most participants: There would never be a job for which this item would ever rate below a "4."

### Question #13

Figure Q: Question 13

13. In your opinion, what one skill is <b>most</b> important to this job? It could be one of the above or it could be another skill. (Please print in the shaded spaces)														

Though most participants stated that this question is clear, many had observations about the question. Issues expressed include that it would be very difficult, for most positions, to name a single, most important skill (one participant asked, "What if this position is 'professor'? What skill could I name?"); that this is redundant to question 4b; and that it is unclear if this is about a specific learned skill or possibly about "people skills." As with similar questions, some participants expressed

displeasure with the letter-entry boxes and stated that they would prefer to write long-hand. Again, this question is a switch back to the *job* from a question about the *employee*.

### Question #14

Figure R: Question 14

14. On a scale of 1 to 5 where 1 means "No Hours" and 5 means "All of the Time", how would you rate the extent to which this job is involved in increasing energy efficiency, utilizing or developing renewable energy resources, or preserving and/or restoring the environment?					
No Hours 1	Only Rarely 2	Some of the Time 3	Most of the Time 4	All of the Time 5	<input type="checkbox"/> Don't know

Many participants were observed to read this question many times over, and several stated as they read it that it did not "flow" with the rest of the questionnaire up to this point. All participants stated that they were confused by the question—both in regard to its incongruence with the rest of the questionnaire, and as to what it is asking; nearly all said that they felt unable to answer the question. Some of the comments include, "Non-sequitur," "Out of synch," "Incongruent and odd question," "Off on its own," "Left-field question," and, "Difficult to understand AND to answer." Those who did not state outright that they would not try to answer the question expressed concern that coming up with an answer would be difficult and time-consuming.

### Question #15

Figure S: Question 15

15. Is this person still employed at your firm?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
---	------------------------------	-----------------------------	-------------------------------------

All participants were observed to get through this question easily and many stated that it was clear, but some noted that, again, they have to shift from thinking about the job to thinking about the employee. One participant stated that this should be the very first question on the questionnaire; several noted that the "Don't know" answer choice seems unnecessary.

### Question #16

Figure T: Question 16

16. Contact person name and title ( <i>Please print</i> )		
First _____	Last _____	Title _____
Phone number ( <i>Please include area code</i> ) _____		
Email address _____		

Nearly all participants were observed to react well to this item. Most stated that they would be willing to provide their information and stated that they assumed the reason had to do with questionnaire follow-up by the WDOE. One participant did express concern that he would end up "on some list."

## Question #17

Figure U: Question 17

<p>17. Would you like to receive a copy of the statistical report compiled from all of the questionnaire results?</p> <p><input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
--

There was little reaction about this survey item, though a few participants expressed appreciation that the WDOE made this option available.

### 4.3. Item 3: Reminder Letter

#### 4.3.1. Initial Impressions: Reminder Letter, unread

Similarly with the cover letter, virtually all of the respondents felt that the reminder letter (Appendix 7.3) conveyed authority and importance, appeared appropriately official, and would capture their attention. Most immediately appreciated how brief the letter looks, and stated that they would likely look it over right away rather than set it aside. Some specific comments included that a high-quality paper and letterhead graphic would be respectful of the reader; that some emphasis (e.g., bolding and/or larger font) that this letter is specifically a reminder would be helpful to get the point across; and that including another copy of the questionnaire might be helpful in motivating employers to complete and return it.

#### 4.3.2. Reminder Letter, read

Many respondents stated that the reminder letter was a better statement of the overall project than was the cover letter; in short, the reminder letter was generally viewed as being more concise. One respondent stated that, in fact, only the first paragraph of the reminder letter is necessary, while another suggested that the letter need not restate the survey's purpose but only serve as a reminder. Others stated that the language could be gentler, as the current text seems slightly accusatory and puts the respondent on the defensive; that it would be helpful to bullet or bold-font "within two weeks," so that it receives proper attention; and that the letter more obviously emphasize that it is a reminder and not a stand-alone letter.

#### 4.3.3. Recommendations, Reminder Letter

Overall, reception of the reminder letter was positive, and most respondents expressed a willingness to read it. The major recommendation is to keep it as brief and concise as possible. Most expressed a preference—for this letter and the cover letter—for brevity and clarity, and for the main points of the letter (namely, that it is a reminder and that the questionnaire should be returned in two weeks) to be more visible/emphatic.

### 4.4. Job Skills Items Discussion (questions 6 through 11)

Questionnaire items 6 through 11 ask the respondent to rate a series of job skills as to their importance to a specific position within an employer's business. The WDOE is interested in whether the information collected by way of these job skills questions will provide the information

necessary to help educators and employment training organizations identify necessary skills and develop appropriate and informed curricula.

Many of the specific issues with these questions have already been addressed above in the sections for each question. Most commonly observed during the cognitive interviewing was reluctance by interviewees to handing off the questionnaire to a supervisor, or that obtaining the requested information would require far longer than the 10 minutes mentioned in the instructional text. One interviewee's first comment upon reading the instructional text before question 6 was, "This is a surprise, [it's] not mentioned in the letter." These types of issues can be addressed with simple modifications to the questionnaire, such as changing the instructional text to be more frank about the required time, and/or better preparing the respondent for the upcoming task.

Also an issue for many respondents was the shifts in subject, which begins at question 6, from employee-specific questions to job-specific questions. Upon reading the instructional text for the job skills question, one respondent began expressing distress about rating how well his employee does at his or her job. When it was explained that they were, in fact, supposed to be thinking of the position in general, the interviewee mentioned that they were "still thinking about the employee from the other side" of the questionnaire. Many more interviewees noticed these shifts and mentioned that they were off-putting and made the questionnaire difficult to navigate.

Most problematic are the issues regarding the types of job skills addressed in the questionnaire (e.g., *reading comprehension*, *coordination*, and so on). Generally, many felt that the named skills themselves were overly broad or too elementary to yield very interesting data. In every interview, it was noted that the skills were universally valuable. After reading through this set of questions, one interviewee asked, "When would these ever be unimportant?" Sentiments such as this were common, and cause us to question the value of the data from these questions. In short, all of these job skills will be rated as important; it therefore seems reasonable to assume that these specific skills will be of value. Perhaps questions addressing specific other skills—such as questions tailored to the particular job in question per questionnaire—would be more useful.

Some interviewees did suggest the design of several industry-specific questionnaires instead of a single all encompassing set of questions for the job skills. One respondent commented that the "specifics of a position are not included," and that the results of this study would be of "no value to my company unless there were an industry type questionnaire." Another commented that "these [job skills] don't mean anything to me because they are too broad," and that, in general, "these categories are not specific enough." It may yield more useful data to design a set of job skill questions focusing on specific skills for different industries. As these questions are, they are unlikely to yield useful data, and it is safe to say that *all* employers will think of the list of skills currently included in the questionnaire as important or very important.

## 5. Conclusions

It is important to note that in terms of comprehension and retrieval, the cognitive interview process did not uncover many serious issues. With a few notable exceptions, the cover letter, questionnaire, and reminder letter were generally understood. Terms used in the materials were understood, concepts were not noted as ambiguous, and complexity did not seem to be a barrier to successfully answering questions. Also, for the most part, the answer choices felt complete to the respondent, and suggestions for asking questions differently were not common.

There were a few standout issues, however, as addressed in the key findings. In almost every interview, the participant mentioned that handing off the questionnaire to a direct supervisor of the employee in question is problematic. Another common sentiment was that the skills mentioned in questions 6 through 11 are too general and too universally valuable to make for meaningful data about the importance of these skills to employers (i.e., *all* will be generally rated as important, which yields little information with regard to policy). It was also noted by many participants that the shift from employee-specific questions to job-specific questions, and back again, was incongruent, confusing, and interruptive of the flow of the survey instrument. Finally, participants noted that question 14 (the “green” question) was something of a non-sequitur and felt out of place in the questionnaire.

Again, though, participants in all cognitive interviews were positively responsive to the interview process and had little difficulty in thinking aloud or responding to probes. In fact, most found the process to be a meaningful way to offer feedback. Most participants were generally attentive to the materials and supportive of the WDOE’s data collection effort. The brevity of the survey was noted and appreciated by all participants. All participants, likewise, expressed a clear understanding of the purpose of the job skills data collection project. The cover letter was uniformly described as “official,” though lengthy. Most participants appreciated being asked if they would like to receive the results of the study.

It is important to note that, in general, the results of the cognitive interviews were consistent across all industry types and company sizes.


## 6. References

- Beatty, P. C., & Willis, G. B. (2007). Research synthesis: The Practice of cognitive interviewing. *Public Opinion Quarterly*, 71(2), 287-311.

## 7. Appendices

### 7.1. Cover Letter

Figure 7.1. Cover letter to accompany survey instrument

 THE STATE OF WYOMING	<b>DAVE FREUDENTHAL</b> GOVERNOR	
P.O. BOX 2760 CASPER, WY 82602	<i>Department of Employment</i> RESEARCH AND PLANNING SECTION	(307) 473-3807
		April 23, 2010 [IDNum]
[Firm Name] [Firm Address Line 1] [Firm Address Line 2] [Firm City State Zip]		
Dear Wyoming Employer:		
<p>The most accurate and useful information about the skills needed by employees come from those who know them best: you. Your company was randomly selected to represent many businesses, specifically regarding the skills needed by newly-hired employees. The information will be used to help you, and employers like you, to have access to the skilled labor essential to your businesses. In addition, it will help educators and employment training organizations identify necessary skills and develop curriculum. The information will also assist vocational counselors and prospective employees to assess the skills needed to be successful. Your response to this survey is critical, since businesses like yours are our only source of information.</p>		
<p>Enclosed [is/are] [Nquestionnaires] regarding the skills of employees who were hired by your firm in the fourth quarter of 2009. For your convenience, you may respond by any one of the following methods:</p>		
<ul style="list-style-type: none"> <li>▪ Completing the questionnaire and returning it in the stamped self-addressed return envelope.</li> <li>▪ Faxing it to us at 1-800-888-8888.</li> <li>▪ Calling us toll free at 1-800-888-8888 and providing your responses to us over the phone.</li> </ul>		
<p>Please respond to the questionnaire no later than May 16, 2010.</p>		
<p>Study results will be broadly distributed to facilitate discussions among members of the community concerned with employee skills. Study results will be posted on our website at <a href="http://doe.state.wy.us/LMI">http://doe.state.wy.us/LMI</a>. Your completed questionnaire will inform future policy choices. <b>All data collected must, by the Wyoming Employment Security Law 27-3-603 and the Workforce Investment Act (see: 29 USC sec. 491-2 (a)(2)), be held in the strictest confidence with results published only as summary statistics. The information you provide to us will be held in confidence to the extent permitted by law.</b></p>		
<p>If you have any questions regarding the study or the survey form, please contact Lisa Knapp toll free at 1-800-888-8888 or <a href="mailto:LKnapp@state.wy.us">LKnapp@state.wy.us</a>.</p>		
<p>Sincerely,</p>		
<p>Tom Gallagher          Manager, Research and Planning</p>		
<p>Enclosures</p>		



### 7.2. Survey Questionnaire

Figure 7.2. Questionnaire, Page 1



<b>Department of Employment Job Skills Survey – Fax to 1-800-888-8888 or 307-473-3863</b>		Rev. 2/2010
	Wyoming Department of Employment Research & Planning [indicates merge field] P.O. Box 2760 Casper, WY 82602 Tel. (800) 888-8888 http://doe.state.wy.us/LMI/	Survey Date: April 2010 <b>Please return form by May 14, 2010</b>  <b>We expect this form to take no more than 10 minutes to complete</b> [EmployerID] [JJ7824.32]
All data collected by Research & Planning must, by the Workforce Investment Act (see: 29 USC sec. 491-2 (a)(2)) and the Wyoming Employment Security Law (section 27-3-603), be held in the strictest confidence, with results published only as summary statistics. The information you provide to us will be held confidential to the extent permitted by law.		
Employee holding this job: [J. Jones]xxx-xx-[2602]	Total pay during reference quarter: \$[7824.32]	
<b>This is a request for information about this job: work, pay, and benefits</b>		
1. The State of Wyoming's Unemployment Insurance database indicates the above-named individual was an employee of your business during some or all of the months of October, November, and/or December of 2009. Is this correct?		
<input type="checkbox"/> Yes ( <i>if yes, please continue</i> ) <input type="checkbox"/> No ( <i>if no, STOP. Please return this form in the enclosed self-addressed stamped envelope or fax it to one of the numbers above. Thank you.</i> )		
2a. What was this worker's rate of pay as of November 12, 2009? \$ _____ per (check one)		
Please include base rate of pay, tips, commissions, and other monetary compensation. If the worker was not employed as of November 12, 2009, please report his or her last pay rate in October, November, or December 2009.		
<input type="checkbox"/> Hour <input type="checkbox"/> Week <input type="checkbox"/> 2 Weeks <input type="checkbox"/> Month <input type="checkbox"/> Other ( <i>specify: e.g. supplemental insurance</i> ) _____		
2b. On average, how many hours did this employee normally work each week at that time? _____ Hours		
3. Were any of the following benefits offered to the worker? ( <i>Please check all that apply</i> )		
<input type="checkbox"/> Health insurance <input type="checkbox"/> Retirement plan <input type="checkbox"/> Paid time off <input type="checkbox"/> Other ( <i>specify</i> ): _____ <input type="checkbox"/> No benefits offered		
<b>Type of Work</b>		
4a. On November 12, 2009, what was this worker's occupation ( <i>For example, secretary, accountant, personnel manager. Please print in the shaded spaces.</i> )		
4b. On November 12, 2009, what were this worker's most important activities or duties? ( <i>For example, typing and filing, reconciling financial records, directing hiring policies. Please print in the shaded spaces.</i> )		
5. Check the qualifications required for the type of work described in questions 4a and 4b. ( <i>Please check all that apply</i> )		
<input type="checkbox"/> On-the-job training <input type="checkbox"/> Associate's degree <input type="checkbox"/> None required <input type="checkbox"/> Postsecondary technical training <input type="checkbox"/> Bachelor's degree or greater <input type="checkbox"/> Other ( <i>specify; for example, a course in medical terminology</i> ) <input type="checkbox"/> Work experience in related occupations <input type="checkbox"/> Licensure or certification _____		
<i>(Over Please) Confidential</i>		

Figure 7.3. Questionnaire, Page 2

<b>Employee Skills</b>		[JJ7824.32]																			
<p>We are seeking information about how important the following skills are for the <b>job</b> in which the worker was employed on November 12, 2009. When possible, we request that the individual's direct supervisor complete all parts of questions 6 through 14. <b>Please use a scale of 1 to 5 where 1 means Very Unimportant and 5 means Very Important. Please circle or check the most appropriate response for this job. Thank you.</b></p>																					
<p><b>6.</b> How would you rate the level of importance for <b>reading comprehension</b> for this job? (Involves understanding written sentences and paragraphs in work related documents.)</p> <p style="text-align: center; margin-left: 20px;"> <span>Very Unimportant 1</span>     <span>Unimportant 2</span>     <span>Neither Important nor Unimportant 3</span>     <span>Important 4</span>     <span>Very Important 5</span>     <span><input type="checkbox"/> Don't know</span> </p>																					
<p><b>7.</b> How would you rate the level of importance for <b>coordination</b>? (Involves adjusting actions in relation to coworkers' actions.)</p> <p style="text-align: center; margin-left: 20px;"> <span>Very Unimportant 1</span>     <span>Unimportant 2</span>     <span>Neither Important nor Unimportant 3</span>     <span>Important 4</span>     <span>Very Important 5</span>     <span><input type="checkbox"/> Don't know</span> </p>																					
<p><b>8.</b> How would you rate the level of importance for <b>critical thinking</b> for this job? (Involves using logic and reasoning to identify the strengths and weaknesses of alternative solutions or approaches to problems.)</p> <p style="text-align: center; margin-left: 20px;"> <span>Very Unimportant 1</span>     <span>Unimportant 2</span>     <span>Neither Important nor Unimportant 3</span>     <span>Important 4</span>     <span>Very Important 5</span>     <span><input type="checkbox"/> Don't know</span> </p>																					
<p><b>9.</b> How would you rate the level of importance of <b>active listening</b> for this job? (Involves giving full attention to what other people are saying and taking time to understand the points being made.)</p> <p style="text-align: center; margin-left: 20px;"> <span>Very Unimportant 1</span>     <span>Unimportant 2</span>     <span>Neither Important nor Unimportant 3</span>     <span>Important 4</span>     <span>Very Important 5</span>     <span><input type="checkbox"/> Don't know</span> </p>																					
<p><b>10.</b> How would you rate the level of importance of <b>active learning</b> for this job? (Involves understanding the implications of new information for both current and future problem solving and decision making.)</p> <p style="text-align: center; margin-left: 20px;"> <span>Very Unimportant 1</span>     <span>Unimportant 2</span>     <span>Neither Important nor Unimportant 3</span>     <span>Important 4</span>     <span>Very Important 5</span>     <span><input type="checkbox"/> Don't know</span> </p>																					
<p><b>11.</b> How would you rate the level of importance of <b>learning strategies</b> for this job? (Involves selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.)</p> <p style="text-align: center; margin-left: 20px;"> <span>Very Unimportant 1</span>     <span>Unimportant 2</span>     <span>Neither Important nor Unimportant 3</span>     <span>Important 4</span>     <span>Very Important 5</span>     <span><input type="checkbox"/> Don't know</span> </p>																					
<p><b>12.</b> How would you rate your overall satisfaction with the employee's <b>work skills</b>? (for example, cooking, customer service skills.)</p> <p style="text-align: center; margin-left: 20px;"> <span>Very Unimportant 1</span>     <span>Unimportant 2</span>     <span>Neither Important nor Unimportant 3</span>     <span>Important 4</span>     <span>Very Important 5</span>     <span><input type="checkbox"/> Don't know</span> </p>																					
<p><b>13.</b> In your opinion, what one skill is <b>most</b> important to this job? It could be one of the above or it could be another skill. (Please print in the shaded spaces)</p> <table border="1" style="width: 100%; border-collapse: collapse; height: 20px;"> <tr> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> </table>																					
<p><b>14.</b> On a scale of 1 to 5 where 1 means "No Hours" and 5 means "All of the Time", how would you rate the extent to which this job is involved in increasing energy efficiency, utilizing or developing renewable energy resources, or preserving and/or restoring the environment?</p> <p style="text-align: center; margin-left: 20px;"> <span>No Hours 1</span>     <span>Only Rarely 2</span>     <span>Some of the Time 3</span>     <span>Most of the Time 4</span>     <span>All of the Time 5</span>     <span><input type="checkbox"/> Don't know</span> </p>																					
<p><b>15.</b> Is this person still employed at your firm?     <input type="checkbox"/> Yes     <input type="checkbox"/> No     <input type="checkbox"/> Don't know</p>																					
<p><b>16.</b> Contact person name and title (Please print)</p> <p>First _____ Last _____ Title _____</p> <p>Phone number (Please include area code) _____</p> <p>Email address _____</p>																					
<p><b>17.</b> Would you like to receive a copy of the statistical report compiled from all of the questionnaire results?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes     <input type="checkbox"/> No                 </p>																					
<p><b>Thank You!</b></p>																					

### 7.3. Reminder Letter

Figure 7.4. Reminder letter

 THE STATE OF WYOMING	<b>DAVE FREUDENTHAL</b> GOVERNOR	
P.O. BOX 2760 CASPER, WY 82602	<i>Department of Employment</i> RESEARCH AND PLANNING SECTION	(307) 473-3807
		May 17, 2010 [IDNum]
[Firm Name] [Firm Address Line 1] [Firm Address Line 2] [Firm City State Zip]		
Dear Wyoming Employer:		
Recently we asked you to participate in the Job Skills Survey. So far we have not received your responses. Because you represent many businesses, and because you know the skills of your employees best, your response is critical.		
Job skills information is used to help inform prospective employees about the most important skills needed to be successful in workplaces like yours. The information also helps educators and training providers know what job skills they need to be teaching students so they are prepared to be effective workers.		
Your data will be combined with information from other respondents so that no individual employer's data can be identified. The information will be used for statistical purposes only and will be held in confidence to the fullest extent permitted by law. Survey results will be published online at <a href="http://doe.state.wy.us/lmi">http://doe.state.wy.us/lmi</a> .		
To make it easy for you to provide the information, you can use the enclosed survey form, report by telephone or by fax. We request that you provide the information within two weeks. If you have any questions, please contact Lisa Knapp toll free at 1-800-888-8888 or <a href="mailto:LKnapp@state.wy.us">LKnapp@state.wy.us</a> .		
Thank you for your time and assistance in completing the survey. If you have already returned the questionnaire, thank you for your responses.		
Sincerely,		
Tom Gallagher Manager, Research and Planning		
Enclosures		

## 7.4. Interviewer Guide

Figure 7.5. Interview Guide, Page 1

### Interview Script

Some tips and keys to a successful cognitive interview:

- Use the “think aloud” strategy along with verbal probing to obtain the best results.
- Provide non-verbal reinforcement to let the subject know that you are listening, such as nodding your head or saying “hmm mmm,” “OK,” and the like.
- Have the subject provide specifics about what they are thinking.
- A few good prompts:
  - “Tell me what you are thinking.”
  - “Keep talking.”
  - “What are you thinking about right now?”
- Be sure to record pertinent non-verbal actions that may reflect how the subject feels about certain questions, such as fidgeting or appearing distracted.
- Align your seating position to be “conversational” in nature. The subject should feel comfortable.
- Questioning during the interview should remain deliberate, even if the feel of the interview is casual. Good pace and rhythm will ensure more efficient data collection (which is good for both the interviewer and subject).

### Protocol:

- Introduction
- Warm-up Session
- Interview with Structured Prompts
  - Detailed notes

**Figure 7.6. Interview Guide, Page 2**

**Warm-up:**

Introducing the idea of thinking out loud: “Thinking out loud may be unfamiliar to you. I want to assure you that there are no right or wrong answers, and that I am only interested in knowing what is going through your mind as you experience this survey and the questions in it. This portion of the interview is for ‘warm-up’ only and is an attempt to let you feel more comfortable with the idea of thinking out loud.”

Warm-up Question:

“Try to visualize the place where you live, and think about how many windows there are. As you count the windows, tell me what you are seeing and thinking about.”

Prompts and responses:

- I am interested in what you are thinking as you visualize the windows in your house.
- Tell me what you are thinking.
- What thoughts are going through your mind right now?
- Good, your comments help me understand what you’re thinking about.

Figure 7.7. Interview Guide, Page 3

Specific probes that can be used during the interview:

Question-Response Process Area	Possible Probe
Comprehension	<ul style="list-style-type: none"><li>• As you read the question (and answer choices), are there any terms you don't understand?</li><li>• Are there any concepts that are ambiguous?</li><li>• How do you feel about the length and/or complexity of the question?</li></ul>
Retrieval	<ul style="list-style-type: none"><li>• When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li></ul>
Judgment	<ul style="list-style-type: none"><li>• Is the question too sensitive for you to feel comfortable answering?</li><li>• Is it hard to make an estimation about xxx?</li></ul>
Response	<ul style="list-style-type: none"><li>• Do you feel that the answer choices are complete?</li><li>• Would you ask this question differently?</li></ul>

Figure 7.8. Interview Guide, Page 4

**Introduction:**

“Thanks for participating in this cognitive interview. We will use your feedback to help the Department of Employment learn more about the skills needed by their employees to better serve employers like you. The purpose of this interview is to find out what you think about two things: the survey instrument used to gather information about employee skills; and the letter that accompanies the survey instrument.”

Do consent.

“The interview format is the same ‘thinking out loud’ process that we did for warm-up. Do you have any questions before we start?”

“I would like to reiterate that there are no wrong answers. I did not design any of the content and you will not hurt my feelings. Feel free to say anything you are thinking.”

Figure 7.9. Interview Guide, Page 5

**Cover Letter**

“First, I am going to ask your opinions about the cover letter that comes with the survey.”

Hand over cover letter.

**Q1.** “Don’t actually start reading it yet, but just look it over.. Take your time, and when you’re ready, tell me any thoughts that come to mind.”

Notes	

**Q2.** “Now go ahead and read the cover letter. Again, take as much time as you need. You can read it to yourself, but as you do please tell me out loud any thoughts that come to mind.”

Possible Probe	Notes
<ul style="list-style-type: none"><li>• Is the survey’s purpose clear?</li><li>• Are the instructions clear?</li><li>• Do you feel that confidentiality is assured?</li><li>• Do you feel that you have the right contact information if you have questions?</li></ul>	



Figure 7.10. Interview Guide, Page 6

**Questionnaire**

"The next set of questions is about the questionnaire itself."

Hand over the questionnaire.

**Q1.** "Don't actually start reading it yet, but please look it over. Take your time, and when you're ready, tell me any thoughts that come to mind."

Notes

**Q2.** "Now please read the first section of the questionnaire. This is the section before question #1. Take as much time as you need. You can read it to yourself, but please tell me your thoughts as you do."

Possible Probe	Notes
<ul style="list-style-type: none"><li>• Is the survey's purpose clear?</li><li>• Are the instructions clear?</li><li>• Do you feel that confidentiality is assured?</li><li>• Do you feel that you have the right contact information if you have questions?</li></ul>	

Figure 7.11. Interview Guide, Page 7

**Q3.** "Now let's talk about the first actual question on the questionnaire. Take your time, and when you're ready, tell me any thoughts that come to mind."

1. The State of Wyoming's Unemployment Insurance database indicates the above-named individual was an employee of your business during some or all of the months of October, November, and/or December of 2009. Is this correct?

Yes (*if yes, please continue*)       No (*if no, STOP. Please return this form in the enclosed self-addressed stamped envelope or fax it to one of the numbers above. Thank you.*)

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question and answer choices, are there any terms you don't understand?</li> <li>Are any of the concepts ambiguous?</li> <li>How do you feel about the length and complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question and answer choices, does the necessary information about this specific job (new hire) come easily to mind?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Are the answer choices complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.12. Interview Guide, Page 8

**Q4.** "Now we will move onto the second question on the questionnaire. Please read Question 2a and answer it to the best of your ability. Take your time, and when you're ready, tell me any thoughts that come to mind."

**2a.** What was this worker's rate of pay as of November 12, 2009? \$ \_\_\_\_\_ per **(check one)** Hour Week 2 Weeks Month Other

Please include base rate of pay, tips, commissions, and other monetary compensation. If the worker was not employed as of November 12, 2009, please report his or her last pay rate in October, November, or December 2009.

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.13. Interview Guide, Page 9

**Q5.** "Staying with the second question on the questionnaire. Please read Question 2b and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**2b.** On average, how many hours did this employee normally work each week at that time? \_\_\_\_\_ Hours

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.14. Interview Guide, Page 10

**Q6.** "Now let's move to the third question on the questionnaire. Please read Question 3 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**3.** Were any of the following benefits offered to the worker? *(Please check all that apply)*

Health insurance                       Retirement plan                       Paid time off  
 Other *(specify)* \_\_\_\_\_                       No benefits offered

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.15. Interview Guide, Page 11

**Q7.** "Now let's move to the fourth question on the questionnaire. Please read Question 4a and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**4a.** On November 12, 2009, what was this worker's occupation (*For example, secretary, accountant, personnel manager. Please print in the shaded spaces.*)

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.16. Interview Guide, Page 12

**Q8.** “Staying with the fourth question on the questionnaire. Please read Question 4b and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind.”

**4b.** On November 12, 2009, what was this worker's most important activities or duties? *(For example, typing and filing, reconciling financial records, directing hiring policies. Please print in the shaded spaces.)*

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>• As you read the question (and answer choices), are there any terms you don't understand?</li> <li>• Are there any concepts referred to that are ambiguous?</li> <li>• How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>• When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>• Is the question too sensitive for you to feel comfortable answering?</li> <li>• Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>• Do you feel that the answer choices are complete?</li> <li>• Would you ask this question differently?</li> </ul>	

Figure 7.17. Interview Guide, Page 13

**Q9.** "Moving on to the fifth question on the questionnaire. Please read Question 5 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**5.** Check the qualifications required for the type of work described in questions 4a and 4b. *(Please check all that apply)*

On-the-job training                       Associate's degree                       None required  
 Postsecondary technical training       Bachelor's degree or greater           Other (*specify; for example, a course in medical terminology*)  
 Work experience in related occupations    Licensure or certification

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	



Figure 7.18. Interview Guide, Page 14

Q10. "Now we'll address the instructions for the next section. Please read the instructions for the next set of questions. Take your time, and when you're ready, tell me any thoughts that come to mind."

We are seeking information about how important the following skills are for the **job** in which the worker was employed on November 12, 2009. When possible, we request that the individual's direct supervisor complete all parts of questions 6 through 14. **Please use a scale of 1 to 5 where 1 means Very Unimportant and 5 means Very Important. Please circle or check the most appropriate response for this job. Thank you.**

Possible Probe	Notes
<ul style="list-style-type: none"><li>• Is the purpose of the questions stated clearly?</li><li>• Are the instructions clear?</li></ul>	

Figure 7.19. Interview Guide, Page 15

**Q11.** "Moving on to the sixth question on the questionnaire. Please read Question 6 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**6.** How would you rate the level of importance for **reading comprehension** for this job? (Involves understanding written sentences and paragraphs in work related documents.)

Very Unimportant 1      Unimportant 2      Neither Important nor Unimportant 3      Important 4      Very Important 5      Don't know

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.20. Interview Guide, Page 16

**Q13.** "Moving on to the seventh question on the questionnaire. Please read Question 7 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**7.** How would you rate the level of importance for **coordination**? (Involves adjusting actions in relation to coworkers' actions.)

Very Unimportant      Unimportant      Neither Important nor Unimportant      Important      Very Important      Don't know  
 1                                  2                                  3                                  4                                  5

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.21. Interview Guide, Page 17

**Q14.** "Moving on to the eighth question on the questionnaire. Please read Question 8 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**8.** How would you rate the level of importance for **critical thinking** for this job? (Involves using logic and reasoning to identify the strengths and weaknesses of alternative solutions or approaches to problems.)

Very Unimportant 1      Unimportant 2      Neither Important nor Unimportant 3      Important 4      Very Important 5      Don't know

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.22. Interview Guide, Page 18

**Q15.** "Moving on to the ninth question on the questionnaire. Please read Question 9 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**9.** How would you rate the level of importance of **active listening** for this job? (Involves giving full attention to what other people are saying and taking time to understand the points being made.)

Very Unimportant 1      Unimportant 2      Neither Important nor Unimportant 3      Important 4      Very Important 5      Don't know

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.23. Interview Guide, Page 19

**Q16.** "Moving on to the tenth question on the questionnaire. Please read Question 10 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**10.** How would you rate the level of importance of *active learning* for this job? (Involves understanding the implications of new information for both current and future problem solving and decision making.)

Very Unimportant 1      Unimportant 2      Neither Important nor Unimportant 3      Important 4      Very Important 5      Don't know

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.24. Interview Guide, Page 20

**Q17.** "Moving on to the eleventh question on the questionnaire. Please read Question 11 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**11.** How would you rate the level of importance of **learning strategies** for this job? (Involves selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.)

Very Unimportant 1      Unimportant 2      Neither Important nor Unimportant 3      Important 4      Very Important 5      Don't know

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.25. Interview Guide, Page 21

**Q18.** "Moving on to the twelfth question on the questionnaire. Please read Question 12 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**12.** How would you rate your overall satisfaction with the employee's **work skills**? (for example, cooking, customer service skills.)

Very Unimportant 1      Unimportant 2      Neither Important nor Unimportant 3      Important 4      Very Important 5      Don't know

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	



Figure 7.26. Interview Guide, Page 22

**Q19.** "Moving on to the thirteenth question on the questionnaire. Please read Question 13 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**13.** In your opinion, what one skill is **most** important to this job? It could be one of the above or it could be another skill.  
*(Please print in the shaded spaces)*

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>• As you read the question (and answer choices), are there any terms you don't understand?</li> <li>• Are there any concepts referred to that are ambiguous?</li> <li>• How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>• When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>• Is the question too sensitive for you to feel comfortable answering?</li> <li>• Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>• Do you feel that the answer choices are complete?</li> <li>• Would you ask this question differently?</li> </ul>	

Figure 7.27. Interview Guide, Page 23

**Q20.** "Moving on to the fourteenth question on the questionnaire. Please read Question 14 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**14.** On a scale of 1 to 5 where 1 means "No Hours" and 5 means "All of the Time", how would you rate the extent to which this job is involved in increasing energy efficiency, utilizing or developing renewable energy resources, or preserving and/or restoring the environment?

No Hours      Only Rarely      Some of the Time      Most of the Time      All of the Time      Don't know  
 1                      2                      3                      4                      5

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.28. Interview Guide, Page 24

**Q21.** "Moving on to the fifteenth question on the questionnaire. Please read Question 15 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

15. Is this person still employed at your firm? Yes No Don't know

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.29. Interview Guide, Page 25

**Q22.** "Moving on to the sixteenth question on the questionnaire. Please read Question 16 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**16.** Contact person name and title (*Please print*)  
 First \_\_\_\_\_ Last \_\_\_\_\_ Title \_\_\_\_\_  
 Phone number (*Please include area code*) \_\_\_\_\_  
 Email address \_\_\_\_\_

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.30. Interview Guide, Page 26

**Q23.** "Moving on to the seventeenth question on the questionnaire. Please read Question 17 and answer it to the best of your ability. Take as much time as you need, and as you read and answer the question, please tell me out loud any thoughts that come to mind."

**17.** Would you like to receive a copy of the statistical report compiled from all of the questionnaire results?  
 Yes No

Question-Response Process Area	Possible Probe	Notes
Comprehension	<ul style="list-style-type: none"> <li>As you read the question (and answer choices), are there any terms you don't understand?</li> <li>Are there any concepts referred to that are ambiguous?</li> <li>How do you feel about the length and/or complexity of the question?</li> </ul>	
Retrieval	<ul style="list-style-type: none"> <li>When reading the question (and answer choices), does the necessary information about this specific job (new hire) come to mind easily?</li> </ul>	
Judgment	<ul style="list-style-type: none"> <li>Is the question too sensitive for you to feel comfortable answering?</li> <li>Is it hard to make an estimation about xxx?</li> </ul>	
Response	<ul style="list-style-type: none"> <li>Do you feel that the answer choices are complete?</li> <li>Would you ask this question differently?</li> </ul>	

Figure 7.31. Interview Guide, Page 27

**Reminder Letter**

“Now let’s take a look at the reminder letter that arrives a few weeks after the survey has been sent. Keep in mind that this letter is sent only to those who have not yet returned the survey.”

Hand over reminder letter.

**Q1.** “Please don’t start reading this yet, but just consider its form. Take your time, and when you’re ready, tell me any thoughts that come to mind.”

Notes

**Q2.** “Now please read the reminder letter. Take your time, and when you’re ready, tell me any thoughts that come to mind.”

Possible Probe	Notes
<ul style="list-style-type: none"><li>• Is the purpose of the survey stated clearly?</li><li>• Are the instructions clear?</li><li>• Do you feel that confidentiality has been assured?</li><li>• Do you feel that you have the right contact information if you have questions?</li></ul>	