

Assessing Workplace Communication Skills with Traditionally Underserved Persons Who Are Deaf

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Introduction

Overview

Within the congenitally deaf population there exists a sizeable number of individuals who are considered to be traditionally underserved. These individuals are characterized by severe communication deficits irrespective of modality (e.g., speech, sign language, reading, writing). Unfortunately, until now there has not been a comprehensive communication assessment approach that was appropriate for this population. Using a functionally based, ecological perspective the Northern Illinois University Research and Training Center on Traditionally Underserved Persons Who Are Deaf developed a work place communication assessment protocol that addresses limitations in previous assessment approaches.

Description of the Population

Traditionally underserved persons who are deaf have historically been referred to as low functioning, low achieving, multiply handicapped, hearing impaired developmentally delayed, severely handicapped deaf, and disadvantaged deaf (Dowhower & Long, 1992). These individuals are typically unable to communicate effectively with others irrespective of modality (i.e., reading, writing, speech, speech reading, sign, gestures). In addition, these individuals are described as having associated deficits in the areas of vocational readiness, independent living, social skills and/or academic achievement.

Although exact prevalence figures are currently unavailable, previous estimates put this number at over 100,000 deaf individuals (COED, 1988). Importantly, these individuals are frequently seen within the vocational rehabilitation and independent living systems. For example, Mathay and LaFayette (1990) estimated that between 50% - 90% of the deaf people being served within these settings would be identified as "low achieving."

Traditional Approaches to Communication Assessment

Communication deficits are the hallmark characteristic of this population. Understanding the individual's communicative competence should assist in program planning and intervention. Unfortunately, all too often communication assessments have been used merely to document the presence of a communication disorder,

provide a diagnosis, or provide prognostic information. These "diagnostic" approaches tend to focus on the individual's weaknesses with little attention directed toward a description of strengths and assets. They tend to focus solely on the individual's communication deficits and do not address how these deficits affect other aspects of the individual's life or the impact they may have on other people in the individual's environment.

Traditional approaches to communication assessment are particularly weak relative to their ability to assist rehabilitation specialists gather information on the communicative needs, skills, preferences, and experiences of traditionally underserved persons who are deaf. Traditional approaches have relied heavily upon the use of standardized tests administered within clinical or office settings. The rationale behind these procedures is to compare the individual being evaluated with a normative group and make predictions as to how his or her behavior will generalize to the real world. Experience has shown that these assumptions are highly suspect. As such, traditional approaches to assessment would seem to have minimal relevance with this population.

**Rationale for a
New Approach to
Communication
Assessment**

Communication assessment strategies supported within the current framework rely heavily upon a functionally based, ecological model. This model assumes that it is impossible to understand the individual's communicative strengths and weaknesses without also understanding his or her background, preferences, and experiences. The model further assumes that specific environmental contexts place different communication demands upon the individual. For example, communication and language use differs between workplaces and homes; therefore, assessment must take into account the forms, words, and demands needed in specific settings. To be successful in a particular setting, it is crucial to understand the communication skills needed for that specific context. This perspective is not meant to lessen the importance of generalizability across settings. Rather, for those individuals with severely limited communication skills, it will likely prove most effective to describe clearly the focus of assessment and subsequent intervention steps.

**Overview of the
Assessment
Process**

The communication assessment model presented herein focuses upon the individual's communication skills relative to specific work environments. Work was chosen as it

provides the context for much of our adult lives. In addition, the process of communication assessment within the current context is intimately tied to the larger picture of job development, placement, and retention for traditionally underserved persons who are deaf.

There are four parts to the assessment process used to determine work place communication skills. They include:

- ***Part I: Consumer Communication Profile***

This is done to describe the functional characteristics of the individual to fully understand the nature of his or her disability (ies), specific communication-related abilities and limitations, as well as relevant background information and experiences.

- ***Part II: Assessment of the Communicative Environment***

It is critical to evaluate the communicative demands of, and potential accommodations within, specific work settings. This approach uses a job analysis approach to gain a clearer understanding of what communication skills the individual needs to be successful.

- ***Part III: Consumer-Environment Communication Match***

Identifying and understanding incompatibilities which exist between known communication limitations of the individual and the communication demands of the work environment will greatly assist in developing accommodations as well as intervention goals.

- ***Part IV: Interventions and Natural Supports***

Specific accommodations are offered to address previously identified communication discrepancies between the individual and his or her work environment. These suggestions rely upon knowledge of the individual's learning styles, potential intervention strategies, and potential natural supports.

- ***Summary Information Form***

The workplace communication assessment protocol advocated within this manual provides a comprehensive description of the individual's communication abilities, workplace demands, communication discrepancies, and potential accommodations. It may prove helpful to summarize specific information about the individual in an effort to communicate information to others. As such, a summary form is provided for this purpose.

References

Commission on Education of the Deaf (1988). *Toward equality: Education of the Deaf*. Washington, DC: U.S. Government Printing Office.

Dowhower, D. & Long, G. (in press). You say "low functioning," we say "traditionally underserved persons who are deaf." The case for a consensual definition. *Journal of the American Deafness and Rehabilitation Association*.

Mathay, M. & LaFayette, R. (1990). Low achieving deaf adults: An interview survey of service providers. *Journal of the American Deafness and Rehabilitation Association*, 23(1), 23-32.

Readers interested in additional background information regarding communication assessment with traditionally underserved persons who are deaf are directed toward the following publication:

Long, G. & Alvares, R. (1995). The development of a communication assessment paradigm for use with traditionally underserved deaf adults. *Journal of the American Deafness and Rehabilitation Association*, 29(1), 1-16.

Part I: Consumer Communication Profile

Purpose	To develop a composite picture of the individual's background, abilities, and interests as related to communication.
Rationale	To most appropriately match individuals with their communicative environments requires a thorough understanding of their specific needs and abilities.
Data Collection Strategies	Case files, medical reports, school records, vocational and psychological evaluations, audiological reports, etc. Interview individual, family members, previous and/or current employers, significant others Observe the individual communicating with various people (deaf, hearing, hard of hearing) across different settings. <i>When collecting information regarding sign language skills and communication preferences it is critical to have someone who is fluent in manual communication assess and interact with the individual.</i>

Sources of Information

What sources of information were used to complete the Consumer Communication Profile?

Name: _____ Relationship: _____ Date: _____

Name: _____ Relationship: _____ Date: _____

Name: _____ Relationship: _____ Date: _____

Name: _____ Relationship: _____ Date: _____

Name: _____ Relationship: _____ Date: _____

Case Record Review:

Type of Report	Date of Report	Source
Psychological		
Medical		
Educational		
Vocational		
Audiological		
Other:		

Observations:

Setting / Environment	Activity	Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Consumer Identification

Name: _____ Race/Ethnicity: _____

Birth Date: _____ Age: _____

Gender: M F Social Security Number: _____

Address: _____

Phone number: _(_____) _____ (v/tty/both)

Marital Status: _____ If married, spouse's hearing status: _____

Briefly describe specific benefits and/or uses this individual derives from their amplification system(s) (e.g., sound awareness, speech discrimination, vocational value): _____

If the individual *has, but doesn't use* their amplification system(s), why not?

Health and Secondary Disability Information

Physical description: _____

General health status: _____

Any physical/health restrictions? _____

Current medications, if any: _____

Any significant visual, motor, cognitive, and/or other disabilities that may affect communication?

Yes No

If yes, please describe:

Current Living Situation

Does the individual currently live with other people? If yes, please identify:

Name	Relationship	Hearing Status	Ability to communicate with the ind.?	How do they communicate (speech, sign, etc.)

How much and what type of exposure (e.g., Deaf clubs, Deaf community activities) does this individual have with other deaf people for socialization and communication purposes? _____

Family Communication Background

Name	Relationship	Hearing Status	Ability to communicate with the ind.?	How do they communicate (speech, sign, etc.)

Were any languages other than English spoken at home (e.g., Spanish, Black English)? _____

What are the parents/family members' attitudes toward communicating with this consumer? _____

Educational Background

Type of school(s) attended: (check all that apply)

	Grades attended
_____ Mainstreamed	_____
_____ Self-contained	_____
_____ Residential (day program)	_____
_____ Residential	_____

Educational achievement:

- _____ 1-6 grade
- _____ 7-12 grade
- _____ Certificate of completion
- _____ G.E.D.
- _____ High school diploma
- _____ Post-secondary vocational training
- _____ College (specify: _____)
- _____ Currently in school: _____

What accommodations were used within education settings to enhance communication?

- _____ Notetakers
- _____ Interpreters
- _____ Teachers who signed
- _____ Other (specify: _____)

What were the most effective communication strategies used with teachers and peers?

Employment Background

Has this individual ever held a job? _____Yes _____No

If yes, where (or most recent)? _____

Describe the type of job, tasks, and environment where this work took place:

How did the consumer communicate with his/her supervisor and coworkers?

What specific communication strategies , support and/or accommodations were used on the job? _____

How effective were these accommodations? _____

Was this individual ever fired or disciplined because of communication problems?

Yes No

If yes, please describe: _____

Communication Skills and Abilities--General

Many traditionally underserved persons who are deaf will have limited ability to talk abstractly about their communication preferences and abilities. As such, it is important for the evaluator to rely upon outside informants who know the client well, have experience with other individuals who are similarly disabled, and, most importantly, have well-developed manual communication skills.

Some of the information requested about communication modalities may not be immediately available to the evaluator. As such, it may be necessary to undertake both formal and informal observations of the individual.

- Observations should be rated in terms of content and intelligibility.
- Ideally, observations will take place in an actual work setting.
- If a work setting is unavailable, observe instances of spontaneous conversation when the consumer interacts with both hearing and deaf people across different settings.
- It may also be valuable for the evaluator (or another individual skilled in manual communication) to engage the consumer in a direct interview to assess general communication skills. Also consider observing a similar conversational task with an unfamiliar, nonsigning partner.

What modes of **expressive communication** does this individual use? (check all that apply). What is his/her **preferred** mode(s)?

	Uses	Prefers
Speech	_____	_____
Sign	_____	_____
Fingerspelling	_____	_____
Communication device	_____	_____
Gestures / pantomime	_____	_____
Gestures and vocalizations	_____	_____
Writing	_____	_____
Drawing/showing pictures	_____	_____
Cued Speech	_____	_____

What modes of **receptive communication** does this individual use? (check all that apply). What is his/her **preferred** mode(s)?

	Uses	Prefers
Speech reading	_____	_____
Sign	_____	_____
Fingerspelling	_____	_____
Gestures / pantomime	_____	_____
Reading	_____	_____
Residual hearing	_____	_____

How does this individual-

Greet others: _____

Get people's attention: _____

Express likes and dislikes: _____

Communicate his/her needs: _____

Communicate choices or indicate preferences: _____

Express displeasure, frustration, and/or anger: _____

Request clarification: _____

Generally make him/herself understood: _____

What kinds of information does this individual communicate spontaneously?

Is this individual generally dependent upon friends and family to help with communication? If yes, explain: _____

Is this individual able to modify his or her message to fit the needs of the listener or do they just give up? If yes, explain: _____

Does this individual understand the concept of turn-taking? _____

With whom, when, where, and under what circumstances does this individual normally attempt to communicate? What modes are generally used?

How would you describe this person's "communicative personality."

_____ Passive

_____ Dependent

_____ Assertive

_____ Other: _____

What is the individual's most effective means of communicating with-

Hearing people who know sign: _____

Hearing people who don't know sign: _____

Deaf people who know sign: _____

Deaf people who don't know sign: _____

What seems to be the most effective way for most people (non-signers) to communicate with this individual? _____

Communication Skills and Abilities-Specific

The following information can be used to develop a composite picture of the consumer's communication skills and abilities across different modalities. It should be stressed, however, that this information will not be sufficient for planning and intervention purposes. It is not environment specific. Consequently, it will be necessary to complete Parts II (i.e., Assessment of the Communicative Environment) and III (i.e., Consumer-Environment Communication Match) to develop individualized vocational communication plans.

Gestural /Pantomime Communication

How intelligible is the individual's message using gestures or pantomime?

- Almost always understood
- Usually understood
- Occasionally understood
- Rarely understood
- Never understood

Does the individual exhibit -

- Good eye contact
- Appropriate facial expressions

Does the individual understand facial expressions? Yes No

Does the individual use facial expressions? Yes No

Comments regarding the individual's use of gestures and pantomime? _____

Manual Communication

Does this individual use manual communication? Yes No
(If no, please skip this section)

What type of sign language is the consumer most comfortable with?

- American Sign Language
- Manually Coded English (e.g., SEE, L.O.V.E.)
- Conceptually Accurate Signed English
- Fingerspelling
- Cued Speech
- Other: _____

At what age was sign language learned? _____

How did the consumer learn sign language? _____

Receptive Signing

Does the Individual understand:	Receptive Signing Proficiency				
	Excellent	Good	Fair	Poor	None
ASL signs					
English-based signs					
Cued Speech					
Instructions accompanied by gestures					
Simple, routine instructions					
Yes/No questions consistently					
“Wh” questions consistently					
Two or more successive questions					
Simple conversation					
Directions (e.g., east west, left, right)					

Expressive Signing

Does the Individual:	Expressive Signing Proficiency				
	Excellent	Good	Fair	Poor	None
Use fingerspelling					
Use simple, concrete, signs					
Produce signs that are clear and understandable					
Express complete thoughts					
Provide sufficient detail					
Use conceptually correct signs (e.g., “right turn” versus “all right”)					
Express ideas clearly					
Ask Yes/No questions					
Ask “wh” questions					
Use clarifiers correctly					
Use space appropriately					
Use appropriate mouth movements					
Use facial expressions and body language to compliment signs					
Participate in simple conversations					
Provide directions accurately (e.g., north, west, left, right)					

Speech

Does this individual use speech (at least occasionally) to communicate?

Yes No (If no, skip this section)

When is speech used?

- _____ To supplement signs
- _____ Instead of signs
- _____ With people who are non-signers
- _____ Other: _____

How often does the individual use their speech?

- _____ Almost always
- _____ Usually
- _____ Sometimes
- _____ Occasionally
- _____ Rarely

How intelligible is the individual's speech to familiar persons?

- _____ Almost always understood
- _____ Usually understood
- _____ Occasionally understood
- _____ Rarely understood
- _____ Never understood

How intelligible is the individual's speech to unfamiliar persons?

- _____ Almost always understood
- _____ Usually understood
- _____ Occasionally understood
- _____ Rarely understood
- _____ Never understood

Writing

Does this individual attempt to communicate through writing?

Yes No (If no, skip this section)

What kinds of information does this individual attempt to communicate through writing? _____

Does this individual have survival writing skills (e.g., name, address)?
Yes No

When is writing used? _____

How legible is this individual's handwriting? (note whether cursive or print)

- _____ Almost always legible
- _____ Usually legible
- _____ Occasionally legible
- _____ Rarely legible
- _____ Never legible

Reading

Does this individual attempt to read written and/or printed text?

Yes No (If no, skip this section)

What kinds of information does this individual attempt to read? _____

Does this individual have survival reading skills (e.g., name, address)?
Yes No

If yes, describe: _____

When is reading used? _____

Speech Reading

Does the individual attempt to read lips and/or understand hearing speakers?

Yes No (If no, skip this section)

Does the Individual understand:	Receptive Signing Proficiency				
	Excellent	Good	Fair	Poor	None
Simple, concrete words and phrases in isolation					
Simple, concrete words and phrases in context					
Simple, routine instructions					
Yes/No questions consistently					
“Wh” questions consistently					
Two or more successive questions					
Simple conversation					
Complex or abstract conversation					

Interpreters and Assistive Technology

Interpreters

Has this individual ever used an interpreter? Yes No

Does the individual understand-

- The interpreter's role and duties? Yes No
- His/her role with an interpreter? Yes No
- When to use an interpreter? Yes No
- How to get an interpreter? Yes No
- Who pays for an interpreter? Yes No

How would you describe this individual's ability, experience, and comfort in using an interpreter? _____

Are there any additional considerations regarding interpreter use with this individual?

Assistive Technology

Is this person a candidate for assistive technology? Yes No

If no, why not? _____

If yes, in what environments and in what way(s) could the person use assistance? Be as specific as possible. _____

Is this person able to manage their own property or could they learn to do so?

Yes No

Are there any needed devices that the individual does not use or own, why not?

(check all that apply)

- _____ Lack of money
- _____ Doesn't perceive potential benefit
- _____ Not available
- _____ Unaware of the item
- _____ Other: _____

Are there an additional considerations regarding the use of assistive technology with this individual? _____

Use the following table to summarize this individual's needs, use, and competence relative to assistive technology:

Device	Needs	Owns or has access?	Skill/familiarity with device		
			Competent	Has difficulty	No experience
TTY/TDD					
Hearing Aid					
Flashing alarm for sleep or phone					
Personal FM system (e.g., Phonic Ear)					
Decoder					
Relay System					
Auditory loops					
Door bell light					
Vibrating alarm					
Vibrating pager					
Baby cry signal					
Phone Amplifier					
Hearing ear dog					

Final Comments

Additional comments regarding any aspects of the individual's communication profile?

Part II: Assessment of the Communicative Environment

Purpose	To describe the nature, type, amount, and importance of communication at a specific work site.
Rationale	Identifying communicative behaviors and accommodations needed within employment settings to guide matching of consumers to jobs as well to provide information necessary to plan interventions.
Data Collection Strategies	<p>Interviews with employers, supervisors, and/or co-workers regarding their perceptions of needed communication skills on the job as well as their relative importance.</p> <p>Observe currently employed workers, especially those who are deaf or have other disabilities.</p>
Overview of Process	<p>Describe the work environment(s) in terms of a) physical barriers and supports for communication, b) interactive and/or social demands, and c) specific communication tasks needed for successful employment.</p> <p>Identify the most important communication tasks and demands within the work site.</p> <p>Identify discrepancies between workplace communication demands and the individual's communication strengths and weaknesses.</p>

Describing the Work Environment

In describing the work environment it is obviously important to identify the specific communication tasks and activities associated with a particular job. It is also important to describe how the physical and social settings may impact the consumer's communicative success. One of the first steps in this process requires that the evaluator identify and describe the various subenvironments (e.g., work area, eating space, social area) in which the consumer will be expected to communicate. It will then be necessary to identify the activities that occur in the various subenvironments and the communication skills needed to perform those activities. This analysis should be based upon subenvironments in which other workers without disabilities usually operate.

Employer Identification

Name of business: _____

Address: _____

Phone: _____ (V) _____ (fax)
_____ (tty) _____ (relay)

Contact person: _____

Number of currently employed deaf workers: _____

Initial Interview Information

When asking the following questions it is important to obtain information that is as specific as possible. General descriptions of "needs to communicate well with coworkers" won't be helpful for planning interventions.

Names and position (employer, supervisor, co-worker) of people interviewed:

Name	Position	Date(s) Interviewed

What kinds of communication skills are needed to do this job? _____

What are the most **frequently needed** communication skills? _____

How critical are these skills? _____

Are there specific communication skills that will be required infrequently?

Yes No

If yes, please describe: _____

What, if any, **experience** does the interviewee have in communicating with people who are deaf? _____

What concerns does the interviewee have regarding communication? _____

Are there likely to be other employees (deaf or hearing) within the consumer's immediate work environment who have manual communication skills?

Yes No

If yes, please describe: _____

Work Site Observations

Answers to the following questions should be based on visit(s) to the work site to observe current employees and the consumer (if already placed). Observations should be scheduled to occur during times when the consumer would be (or is) working.

Observation Strategies

The goal is to systematically observe co-workers performing the job or a highly similar job. These observations may be taken formally and/or informally. With all observational strategies consider the potential impact the observer's presence may have on the individual(s) being observed.

Depending upon the nature of the environment and the consumer's needs the following strategies may prove helpful:

- Observe selected employees at predetermined times.
- Directly observe employees throughout the work day.
- Develop questionnaires and/or interview employees to probe specific communication requirements of various tasks.

When observing communicative exchanges, particularly those that include the consumer be sure and note:

- What was communicated? (topic)
- How was it communicated? (modality)
- Was the exchange successful?
- Who did most of the work to ensure understanding?

Date(s) and times of observation: _____

Observer's name: _____

Setting: _____

Job(s) being observed: _____

Describe the primary work area: _____

Are there other areas (e.g., lunchroom, social area) where employees spend time?

Yes No

If yes, please describe: _____

How much time is normally spent in each area?

What types of communicative interactions occur in each area? _____

How many co-workers are in the immediate work area? Are any of them deaf or have other disabilities? _____

Determining Critical Communication Skills

The preceding work site communication analysis should yield a description of communication skills needed by the consumer to function successfully within a specific work environment. The next step in the analysis is to determine which of the skills are most important and whether the consumer possesses them. The question of whether the consumer possesses these skills can be answered through direct observation and/or a review of the information generated in *Part I: Consumer Communication Profile*.

To assist in this process the following tables were developed. They include communication skills generally seen as important within work settings. Space is available within each table to add specific items that may be unique to the work site being assessed.

The column headings are designed to help with the identification of specific communication concerns for the individual. They are as follows:

- **Importance.** How important is it for the consumer to possess a particular communication skill within the work environment?
- **Skills Possessed?** To what extent does the consumer possess this skill? Is it always, sometimes, or never available for use?
- **If possessed, mode(s)?** If the consumer has the ability (at least sometimes) to understand or convey a needed communication skill then what mode(s) does he or she use?
- **Discrepancy?** A check mark should be placed in this column to identify skills that are identified as "very or "somewhat" important" within the environment but which the consumer does not possess.

Expressive Communication Skills

For this position is it important that the consumer:

	Importance			Skill Possessed?			If possessed, mode?				Discrepancy? (impt. not possessed?)	
	Very	Some-what	Not	Yes	No	Sometimes	Sign	Speech	Writing	Gesture or mime		
Be able to convey:												
Full name												
Home Address												
Telephone#												
Age												
Employer's name												
Employer's Address												
Basic needs (e.g. bathroom, hunger)												
Be able to request:												
Information												
Assistance												
Permission												
Clarification												

Expressive Communication Skills (cont'd.)

For this position is it important that the consumer:

	Importance			Skill Possessed?			If possessed, mode?				Discrepancy? (impt. not)	
	Very	Some- what	Not	Yes	No	Some- times	Sign	Speech	Writing	Gesture or mime		
Tell a supervisor he/she:												
Is confused												
Finishes a job												
Feels sick or tired												
Makes a mistake												
Tell a co-worker when he/she												
Needs help												
Needs materials												
Initiate conversations												
Respond to criticism												
Respond when ordered to change jobs												
Display appropriate assertiveness												
Greet co-workers												

Expressive Communication Skills (cont'd.)

For this position is it important that the consumer:

	Importance			Skill Possessed?			If possessed, mode?				Discrepancy? (impt. not)	
	Very	Some- what	Not	Yes	No	Some- times	Sign	Speech	Writing	Gesture or mime		
Tell others about the disability and needed accommodations												
Use a TTY												
Other Items specific to this work site												

Expressive Communication Skills (cont'd.)

For this position is it important that the consumer:

	Importance			Skill Possessed?			If possessed, mode?				Discrepancy? (impt. not)	
	Very	Some-what	Not	Yes	No	Some-times	Sign	Speech	Writing	Gesture or mime		
Understand and accept criticism												
Understand work-related terminology												
Read and follow simple directions												
Follow instructions with words such as:												
in, on												
to the right, left												
under, over												
press, hold, twist												
Read and use a telephone book												
Understand and respond appropriately to safety signals												

Expressive Communication Skills (cont'd.)

For this position is it important that the consumer:

	Importance			Skill Possessed?			If possessed, mode?			Discrepancy? (impt. not possessed?)
	Very	Some-what	Not	Yes	No	Sometimes	Sign	Speech	Writing	
Read labels, signs, warnings, or other documents that provide information										
Understand and respond to social contact										
Other items specific to this work site--										

Part III: Consumer-Environment Communication Match

Purpose	To prioritize and select consumer communication skills open to potential remediation and/or accommodation.
Rationale	Identifying an appropriate match between a consumer and a work setting greatly enhances the likelihood of consumer satisfaction and job retention.
Data Collection	Interview the consumer as well as employers, supervisors, and/or co-workers.
Overview of Process	<p>Prioritize and describe previously identified discrepancies between needed communication skills and consumer abilities.</p> <p>Assess possible work site accommodations, assistive technology, and natural supports to minimize communication discrepancies.</p> <p>Determine potential training goals to enhance specific consumer communication deficits.</p>

Prioritize and Describe Communication Discrepancies

Information developed in *Part II: Assessment of the Communicative Environment* identified discrepancies between needed communication skills and consumer competencies. The next step in this process is to highlight which discrepancies are most critical as well as describe the reason(s) for the discrepancy.

Refer to the discrepancy analyses on pages 33 - 37 and complete the following table as described:

1. Transcribe each of the communication skills in which a discrepancy was noted onto the following list.
2. Using information generated in Parts I and II of this evaluation protocol, briefly describe the reason(s) for each discrepancy.
3. Ask your contacts (i.e., employer, supervisor, and/or co-workers) to prioritize the identified discrepancies relative to probable job success.

The following example may make this process a bit clearer. Assume that you have identified the following two communication tasks as ones that are required by the environment but that the consumer does not possess:

- 1) Able to convey home address and 2) Respond to criticism

These tasks should then be entered into the first column of the table.

Next, briefly describe the reason for the discrepancies and enter this into the third column of the table.

Home address-Recently moved. Hasn't learned his new address.
 Criticism-Communication skills are limited to concrete words and functions.
 Doesn't understand language.

Finally, talk with your contact(s) at the work place. Have the individual(s) help you determine how critical the skills are for the job.

Home address-Important
 Criticism-Moderate

Task Discrepancy	Task Prioritization				Reason for Discrepancy
	Critical	Important	Moderate	Low	
Able to convey home address		✓			Recently moved, hasn't learned new address.
Responds to criticism			✓		Very limited language skills

Does the consumer agree about which skill discrepancies are most likely to jeopardize job placement and retention?

Yes No

If no, describe specific areas of disagreement: _____

Identification of Work Site Accommodations

There are numerous accommodations, assistive devices, and special services available to assist traditionally underserved persons who are deaf with communication. Use the suggestions provided on the following list to complete the table on the next page.

Keep in mind that accommodations should be:

- Chosen with the assistance of the consumer;
- Designed to promote individuality, independence, and autonomy;
- As inconspicuous as possible yet still effective.

Potential Work Site Accommodations:

Assistive Devices: decoders, personal FM systems, tactile aids, auditory loops, TTYs, flashing or vibrating alarms, vibrating pager, telephone amplifier, baby cry signal, door bell light hearing aid, cochlear implant.

Special Services: interpreters, note takers, tutors, hearing ear dogs.

Site/Job Modification: job restructuring, modification of work site, work station, or work activities.

Complete the following tables:

1. Organize identified communication discrepancies in order of their priority.
2. Determine whether there are work site accommodations that are either currently available, potentially available, or not available.
3. Describe the available and/or potentially available accommodations.

Critical Communication Discrepancies	Availability and Description of Potential Accommodations
	Yes:
	Potentially:
	No:
	Yes:
	Potentially:
	No:
	Yes:
	Potentially:
	No:
	Yes:
	Potentially:
	No:
	Yes:
	Potentially:
	No:
	Yes:
	Potentially:
	No:

Critical Communication Discrepancies	Availability and Description of Potential Accommodations
	Yes: Potentially: No:
	Yes: Potentially: No:
	Yes: Potentially: No:
	Yes: Potentially: No:
	Yes: Potentially: No:
	Yes: Potentially: No:
	Yes: Potentially: No:
	Yes: Potentially: No:

Critical Communication Discrepancies	Availability and Description of Potential Accommodations	
	Yes:	
	Potentially:	
	No:	
	Yes:	
	Potentially:	
	No:	
	Yes:	
	Potentially:	
	No:	
	Yes:	
	Potentially:	
	No:	
Low Priority Communication Discrepancies	Availability and Description of Potential Accommodations	
		Yes:
		Potentially:
No:		
	Yes:	
	Potentially:	
	No:	
	Yes:	
	Potentially:	
	No:	

Identification of potential training goals

Certain communication discrepancies between consumers and their environments will not be open to accommodations, assistive devices, special services, and/or other site modifications. In those instances it may be necessary to provide training to help remediate specific consumer communication deficits.

Complete the following table:

1. Review the information contained in previous table.
2. List "critical" and "important" communication discrepancies for which there *do not appear to be potential accommodations*.
3. Describe potential training strategies to help the individual acquire the skill.

Critical Communication Discrepancies	Potential Training Strategies

Critical Communication Discrepancies	Potential Training Strategies
Important Communication Discrepancies	

Part IV: Interventions and Natural Supports

Purpose	To describe potential interventions and natural supports designed to reduce consumer-environment communication discrepancies.
Rationale	Prior sections of this evaluation protocol have served to identify and subsequently target important discrepancies between consumer communication skills and environmental demands. To address these discrepancies requires a knowledge of potential intervention strategies and natural supports that may be particularly useful for traditionally underserved persons who are deaf.
Data Collection Strategies	<p>Interview the consumer, family members, rehabilitation professionals, and educators about the consumer's preferences, learning style, and potential interventions.</p> <p>Interview the employer, supervisor(s), and co-workers to determine the likelihood and availability of natural supports for the consumer within the work place.</p>

Learning Styles and Accommodations

Intervention targets have been identified as discrepancies between the consumer's communication skills and the demands placed upon him or her within the work environment. Many of these discrepancies can be addressed through accommodations and work place modifications. To make the best match between consumers and potential accommodations requires a consideration of their learning styles and work place supports. The following questions can be used to help guide the evaluator through this process. Following these questions a number of specific communication accommodations are provided. These accommodations are provided simply as a reference for the kinds of accommodations that have been used by service providers when working with traditionally underserved persons who are deaf.

How does this individual seem to learn things? _____

What instructional strategies seem to work best with this consumer? _____

Are there specific learning strategies that should be avoided? _____

Does there appear to be evidence of generalization from old tasks to new ones? _____

Are there significant barriers to learning in addition to the consumer's hearing loss (e.g., physical limitations, severe behavior)? _____

Are there characteristics of the work environment that would tend to encourage the adoption of specific intervention strategies? _____

Are there characteristics of the work environment that would tend to discourage the adoption of specific intervention strategies? _____

What is the employer's attitude toward job accommodations and special services? _____

The following list provides specific recommendations for enhancing work place communication for traditionally underserved persons who are deaf.

Assistive technology

- Decoders
- Personal FM Systems
- Telephone relay system
- Auditory loops
- TTYs
- Flashing alarm, door bell, etc.
- Vibrating alarms, pagers, etc.
- Telephone amplifier
 - Built in or portable, desk type
 - Speaker, receiver, and/or ring amplification
- Visual alarm clock Baby cry signal (for the homemaker, baby sitter, nursery worker)
- Bed or pillow vibrator
- Silent pager
- Bone conduction aid
- Tactile speech/sound alert system
- Door bell light: Permanent or portable? Strobe or blinking?
- Group access system: Loop, AM/FM or infrared options? Direct audio input or hardware possibilities?

Special Services

- Interpreters (company-based or contracted as needed)
- Note takers
- Hearing ear dog
- Tutors

Additional Interventions and Accommodations

- Develop a chart with the times and duties (words and/or pictures). Coworkers and supervisor will be able to redirect the employee who is off task to refer back to this chart.
- Develop a flip ring of pictures (Polaroid if possible) of the employee engaging in each job duty.
- Develop a communication book including pictures, signs, and words for work-related vocabulary. Books will have some standard words; however, most of the words included in this book should focus on specific job duties.
- Color coding can be helpful, particularly if work responsibilities include some kind of matching task (e.g., what chemical to clean what area, which burger to put in what paper wrapper, dangerous items/chemicals, and/or areas off limits to that particular employee).
- Alphamate pager system (sends 1-2 line messages to Deaf person).

Additional Intervention and Accommodations (cont'd)

Write notes or correspond via TDD or computer (keyboard/screen.)

Use job coach as both trainer and interpreter (between employee and supervisor).

Give the consumer a daily task list of work duties by supervisor at the beginning of each work day.

Develop color coded cards for assembly procedures.

Provide the consumer with a vibrating pager to gain their attention.

Be creative, invent gestures that are easily understood and easily learned by the consumer, supervisor, and the other workers.

Include line drawings/pictures with written notes.

If consumers are unable to tell time, use a vibrating beeper to prompt them regarding a change in schedule or task.

Use note takers for meetings so information can be re-taught until it is learned and/or understood.

Institute sign classes for co-workers.

Use a "buddy-system" for emergency alerting purposes.

Use a "clarifier," that is, a person in

addition to the interpreter-often a deaf person who is skilled in communicating with consumers who have significant communication deficits.

Distribute "survival sign language" pamphlets for co-workers

Provide education/awareness training to immediate supervisors and coworkers.

Relocate the work station to maximize visual orientation to work-environment.

Use of TTY equipped with large-visual display for communication purposes with consumers who are visually-impaired.

Alphamate pager system (sends 1-2 line messages to Deaf person).

Write notes or correspond via TDD or computer (keyboard/screen.)

Use job coach as both trainer and interpreter (between employee and supervisor).

Give the consumer a daily task list of work duties by supervisor at the beginning of each work day.

Develop color coded cards for assembly procedures.

Provide the consumer with a vibrating pager to gain their attention.

Identification of Natural Supports

One of the underlying assumptions throughout this communication assessment protocol is that it occurs as part of a broader job placement and job retention effort. This approach has repeatedly emphasized the dynamic interaction between the consumer and his or her environment. An aspect of this interaction that is often overlooked concerns the identification and development of natural supports for communication. These supports relate to "people factors" that can greatly enhance (or hinder) the consumer's success on the job. Successful identification and use of natural supports can assist the consumer to become an integrated, valued part of the workplace social life. As such, the following, and final, section of this communication evaluation is designed to help the evaluator identify potential sources of natural supports.

Are people working in close enough physical proximity to communicate with the consumer and be socially supportive? _____

Are informal, positive communicative interactions observed among co-workers during work hours? _____

Are there activities that occur outside of normal working hours (e.g., social gatherings, recreation activities, outings) that are potentially open to the consumer? What types of communication skills would be needed in these settings? _____

Do there appear to be any co-workers who have prior experience interacting with deaf people and/or who know sign language? Would they be willing to be a "liaison" between the consumer and other employees? _____

Summary Information

Name: _____ Date: _____

Address: _____

Evaluator(s): _____

Reason for referral: _____

Communication preference(s): _____

Preferred accommodations: _____

Work place: _____

Needed communication skills: _____

Critical accommodations and training targets: _____

Needed accommodations and training targets: _____

Intervention plan and natural supports: _____

