

Teaching Communication Skills to Students with Severe Disabilities

Third Edition

by

June E. Downing, Ph.D.

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and

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with invited contributors

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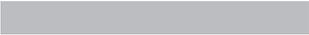
Excerpted from Teaching Communication Skills to Students with Severe Disabilities, Third Edition

by June E. Downing Ph.D., Amy Hanreddy Ph.D., Kathryn Peckham-Hardin Ph.D.

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About the Authors

June E. Downing, Ph.D., was a national leader in the field of special education who focused her expertise, time, and energy researching best practices and advocating for individuals with severe and multiple disabilities. She was a steadfast promoter of inclusive education, viewing access to the general education program and peers without disabilities as best practice, as well as an issue of social equality and civil rights. Dr. Downing was an exceptionally productive scholar who published numerous articles, chapters, monographs, and textbooks focusing on the education and inclusion of students with



severe and multiple disabilities. Her publications are used by many educators and parents to learn how to provide quality education in inclusive classrooms to students with severe and multiple disabilities. Dr. Downing provided numerous professional development trainings in many regions of the world and served as the keynote speaker at several national and international conferences. She was known for her practical, invigorating, and humorous presentations and workshops. Dr. Downing's career in the field of special education began as a teacher of students with visual impairments and multiple disabilities including deafblindness. She was Associate Professor at the University of Arizona in Tucson and Professor at California State University, Northridge (CSUN). She directed or codirected several federally funded personnel preparation, research-to-practice, and technical assistance projects and was committed to preparing exceptional, highly qualified teachers, whose role she saw as change agents for the future. Through Dr. Downing's teaching and hands-on guidance, her students developed a passion for teaching and a strong commitment to supporting quality lives for students with disabilities and their families. While at CSUN, Dr. Downing contributed to the development of the CHIME Institute's Charter School and was instrumental in its high-quality inclusive educational practices. Dr. Downing served on the National TASH Board of Directors for six years and was Past President of Cal-TASH and AZ-TASH (the California and Arizona state chapters of TASH). She also served as an associate editor of *Research and Practices for Persons with Severe*

Disabilities. Dr. Downing retired from CSUN in 2007 and returned to Tucson, where she lived until her death in July 2011. Her indomitable spirit, passion, and determination have been a driving force in our field, and her work continues to inspire and create positive and successful learning outcomes for students.

Amy Hanreddy, Ph.D., is Assistant Professor in the Department of Special Education at California State University, Northridge. She teaches classes related to inclusive and collaborative practices that benefit all students, as well as classes specifically designed for candidates in the moderate to severe special education credential program. Dr. Hanreddy is particularly interested in strategies that allow students with significant disabilities to gain access to meaningful instruction in academic (core) content in the context of typical (general education) settings. Dr. Hanreddy has taught as a special education teacher in a traditional school district and at CHIME Charter School, a fully inclusive, nationally recognized school, where she has also served as Director of Curriculum and Instruction and as Interim Executive Director. Dr. Hanreddy has presented at state, national, and international conferences on topics related to inclusive education and meeting the needs of students with moderate to severe disabilities, special education in charter schools, and collaborative service delivery. She is interested in augmentative and alternative communication and literacy for students who do not use verbal speech, as well as strategies to support communication and relationships between peers with and without disabilities.

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Assessing Communication Skills

June E. Downing, Kathryn D. Peckham-Hardin, and Amy Hanreddy

When communicative behavior is vague and idiosyncratic due to severe and multiple disabilities, the recipients of the communicative exchange must be particularly sensitive and responsive in order to assess the communication skills of the individual with disabilities (Beukelman & Mirenda, 2013; Cress & Marvin, 2003; Dennis, 2002). This assessment process can be challenging because the students' impairments may interfere with their ability to engage in clear, reliable, and intentional communicative behavior (Lancioni et al., 2007). Assessment strategies, therefore, must be sufficiently sensitive to determine the communication skills and strengths of these individuals.

ASSUMPTIONS GUIDING THIS CHAPTER

This chapter begins with the premise that all students communicate; but, as previously noted, how that message is conveyed and the clarity of that expression will differ among individuals. A second premise is that communication support and intervention should be available to all students who need this support. Students with severe and multiple disabilities often experience communication challenges for a number of reasons (see Chapter 1). These students should not have to prove they are eligible to receive communication training/intervention, nor should they be made to wait until they develop the prerequisite skills someone has determined are needed before intervention can commence. The National Joint Committee for the Communication Needs of Persons with Severe Disabilities (1992) clearly

stated that communication and communication supports are basic rights of every individual. A third premise is that receptive and expressive communication skills are equally important and, in fact, go hand in hand. The students must be able to understand (receptive language) the object, symbol, picture, or verbal statement in order to use these various modalities to express (expressive language) their understanding of these messages. Thus, assessment efforts must capture both sets of skills. Finally, the fourth premise of this chapter is that assessment matters. Good assessment practice means gathering relevant and meaningful information that will help the individualized education program (IEP) team design effective communication interventions that will result in an improved quality of life for the target student.

PURPOSES OF ASSESSMENT

Many reasons exist for assessing skills. Assessment can be used to determine whether a student needs assistance, whether a student is progressing according to a specific intervention plan, and what skills a student should tackle next. Assessment information can clarify a student's current skills and can help all educational team members recognize those skills. Obtaining a clear idea of a student's communication abilities is essential for effective education because communication skills allow students to demonstrate what they know. This chapter focuses on assessment for the purpose of identifying what communication skills are needed in a variety of natural settings, what communication skills the student has and still needs to learn, how communication skills are best taught and supported, and how to monitor student progress.

Standardized Assessments

Standardized assessments play an important role in helping to establish initial eligibility to receive special education services. The Individuals with Disabilities Education Improvement Act (IDEA) of 2004 (PL 108–446) requires assessments to be conducted to determine if the student meets one or more of the 13 disability categories in order to be eligible to receive special education services. Standardized tests can also provide a general overview of the student's strengths and areas of need, which may be helpful in identifying areas for future and more in-depth assessments (Ross & Cress, 2006)

Although standardized assessments can be helpful for establishing initial eligibility, these types of assessments are much less helpful when conducting assessment for the purpose of developing communication interventions and supports (Snell, 2002). In fact, these types of assessments are often problematic for a number of reasons. First, students with severe disabilities typically do not perform well on standardized assessments. This is partly because the assessments are often designed using a developmental framework, meaning the goal is to determine where the student functions along a developmental hierarchy. The results, not surprisingly, frequently report that students with severe and multiple disabilities score significantly behind their peers without disabilities. A second reason students with severe and multiple disabilities may not perform well is that the tests ask the student to respond to direct questions out of context. Without contextual cues, the student may not understand the request nor see a reason to perform the desired skill. Third, the assessments often do not account for communication,

cognitive, and/or physical disabilities that may affect the student's ability to perform the requested skill. For example, the assessment may ask a student without oral language to say his or her name or ask a student with limited use of his or her arms to touch his or her head. The way that results are presented is another problem with standardized assessments. The results are typically described in terms of where the student falls on a developmental scale (based on typical development), rendering a score based on a mental or cognitive age (e.g., 9 months). Talking and thinking about students based on their proposed mental versus chronological age unfortunately can result in students being treated in an age-inappropriate manner. In addition, the test results do not differentiate between what a student needed to do (as dictated by the social environment) and could not do (due to physical or intellectual challenges) and between what the student was or was not motivated to do. The resulting test scores, therefore, may not accurately reflect what that student could do in a much different and more natural situation. Finally, standardized assessments fail to provide the planning team with practical information that can be used for intervention purposes (Fewell, 2000; Taylor, 2003). If such assessments are used, then it is recommended that additional assessments based on an ecological model (see next) be used to supplement these findings in order to provide a more robust picture of the student's communication strengths and areas of need.

Alternative Assessment Strategies Based on an Ecological Model

The ecological model is an alternative form of assessment that can be individualized to address important questions regarding what the student needs and wants to communicate, where the communication is likely to occur, and with whom (Blackstone & Berg, 2003; Snell, 2002). This model uses observational techniques to analyze skill demands of the natural environment and determine how the student performs within these environments (Downing & Demchak, 2008; Renzaglia, Karvonen, Drasgow, & Stoxen, 2003; Westling, Fox, & Carter, 2015). Different observational techniques allow for a more in-depth, comprehensive, and accurate estimate of a given student's abilities and areas of need. Observational measures do not provide the assessor with a cognitive or mental age. Instead, these tools provide valuable information about how individual students typically perform and how the student is expected to perform. The student is more apt to be motivated to communicate and understand the reason to do so in the midst of typical and familiar situations (Ogletree, Bruce, Finch, Fahey, & McLean, 2011). A more accurate picture of that student's skills is attainable when the student is familiar with the environment, routine, and expectations of natural communication partners.

The obvious benefit of an ecological assessment rather than a standardized one is that it directly leads to an appropriate intervention plan (Beukelman & Mirenda, 2013; Snell, 2002). The teacher does not have to extract information from a standardized form that may not reflect the immediate needs of the student and then attempt to adapt those findings to a completely different environment. Instead, the assessment is completely individualized to meet the unique needs and desires of the student as he or she performs meaningful activities. There is no guesswork involved or difficulty applying the information because the assessment occurs in the environment and activities in which the student is already engaged. Educational team members must carefully formulate the questions that are most critical to answer to obtain the most useful information. Their observations of the student can then be structured to address these questions.

WHO SHOULD ASSESS? ASSESSMENT IS A TEAM EFFORT

Assessment is a team effort. No one person is solely responsible. Instead, various individuals contribute their expertise to the assessment process to obtain the richest and most important information about a student's communication skills (Hunt, Soto, Maier, Muller, & Goetz, 2002). The value of a team approach is that the work is shared and different team members can obtain information in different activities and environments as they naturally work with a student (see Chapter 2). Each person's role in collecting information will be determined by the time he or she spends with the student, his or her experience, and by any unique skills each person may possess regarding observational skills, knowledge of assistive technology, and cultural and linguistic background. For instance, a paraeducator who is bilingual and is liked by the family may be an excellent team member to talk with the family (who does not typically speak English) to determine their hopes and wishes for their child.

Role of Family Members

Interviewing those most familiar with the student is one way of obtaining practical information concerning the student's communication skills. Parents and other family members provide considerable information regarding how their child/sibling communicates, with whom he or she interacts, and in which situations they are more or less likely to elicit and/or sustain communication. Family members provide information pertaining to the child's communicative behavior in the home, which can be different from what is observed at school. They also identify circumstances surrounding communication breakdowns and areas in which they wish the student could do more. Family members can also provide considerable information regarding what intervention strategies have been tried and how successful they were. Finally, they can be valuable resources for understanding what the student may do if his or her communicative efforts are not accepted. Figure 3.1 provides an example of an interview guide used to obtain this kind of information from those closest to the student.

Family members need to feel comfortable stating which communication skills would be most helpful or critical for the student to learn. Expressing basic needs may be a priority for some family members, whereas following directions and understanding what is being said could be priorities for others. Some families will value communication skills that help develop friendships, whereas others will prefer skills that help the student respond to direct questions. Priorities of family members typically represent a good place to start. They will probably expect increased communicative competence as their children acquire essential receptive and expressive communication skills.

Family members and significant others, such as friends, will also have preferences for the kinds of communication modes they use with the student. Some will prefer to interact with the child (or adult) without using augmentative and alternative communication (AAC) devices, whereas others will want to utilize whatever means is most effective. Some will prefer advanced technological devices; others will opt for simpler modes. Some families will eagerly embrace the use of a visual-spatial mode of communication, such as one of many different manual sign systems, whereas others will feel uncomfortable with such an approach. Each family is unique, and their dreams and hopes for the ways in which they wish to interact

COMMUNICATION STYLE ASSESSMENT

Individual's name _____ Age _____

Completed by _____ Date _____

1. How does the individual generally make him- or herself understood (vocalizing, gestures, graphics, object cues)?

2. How do you communicate with the individual?

3. What kinds of information does the individual spontaneously communicate?

4. How does the individual gain your attention when you are not paying attention to him or her?

5. How does the individual ask questions for information, personal needs, and directions?

6. How does the individual communicate when he or she likes something (gestures, smiles, grabs, vocalizes)?

7. How does the individual communicate when he or she dislikes something (gestures, throws tantrums, looks away, cries)?

8. Under what circumstances does the individual interact with others (play games with others, engage in turn-taking, have a conversation)?

9. How does the individual communicate choices or indicate preferences?

10. What communication skills would you like the school/program to work on first?

Figure 3.1. Communication style assessment. (From Gothelf, C.R., Woolf, S.B., & Crimmins, D.B. [1995]. Transition to adult life: The transition process. In K.M. Huebner, E. Joffe, J.G. Prickett, & T.R. Welch [Eds.], *Hand in hand: Essentials of communication and orientation and mobility for your students who are deaf-blind* [Vol. 1, pp. 446–463]. New York, NY: American Foundation for the Blind Press; adapted by permission.)

with their family member need to be respected. Cultural beliefs and values will also play a major role when supporting those closest to the student (Lynch, 2011; Soto & Yu, 2014). Demonstrating sensitivity to cultural differences is of critical importance when collecting information that will lead to effective intervention (Huer, 2002; Huer, Parette, & Saenz, 2001; Soto & Yu, 2014).

Role of Teachers and Paraeducators

The general and special education teacher can provide information on the type of directions, requests, questions, or social initiations the student responds to at school. For instance, the general educator may note that when he or she presents options when asking questions, the student is more likely to respond versus when he or she asks open-ended questions. Education staff can also observe whether the student notices and attempts to model their peers' behavior. For example, does the student notice when everyone else is getting out their textbook and do this as well? School staff are also in a position to document specific forms of communication used by the student, including how the student indicates he or she is finished, needs help, or wants to make a comment. School staff can similarly note if and how the student initiates interactions with others. Finally, education staff can help identify specific barriers to effective communication. For example, are communication opportunities consistently provided? Is the communication device easily accessible at all times? Is the device in good working order? Do all staff know how to correctly use it? The questions presented in Figure 3.2 are useful for teachers, paraeducators, and other school faculty, although family members can contribute answers as well.

Role of Related Services Staff

Specialists in the areas of occupational therapy, physical therapy, and visual and hearing impairments all need to contribute their knowledge to the assessment of a student's communication skills. Physical therapists can provide information on appropriate positioning and equipment and how these affect the student's movement and range of motion. The occupational therapist can assess the student's ability to produce manual signs, select a message by pointing, manipulate objects, or utilize a keyboard. This person can also introduce adaptations, such as orthotic aids, hand or head pointers, and adaptive keyboards, and can determine how they influence the student's performance. A vision specialist can help determine how well the student sees and how a vision loss may impair communication skills. This individual can also help determine the size of symbols needed and the benefit of adding color, contrast, or specific lighting. If vision is not a viable mode for the student to acquire information, then this specialist can help devise a tactile or auditory system. The hearing specialist can help determine the student's ability to hear as well as the need for adaptations in the event the student has a hearing loss (e.g., hearing aids, FM system, increased visual input). This specialist can provide information on optimal acoustic environments for the student and can explain discrepancies in performance based on different environments.

Role of Classmates

Finally, classmates can provide anecdotal information about how they interact with a peer with severe disabilities. Seeking input from classmates regarding the

<p>1. What mode(s) is the student using to communicate throughout the day?</p> <p>_____</p> <p>_____</p>
<p>2. Does the student have a means to initiate an interaction? How?</p> <p>_____</p> <p>_____</p>
<p>3. Does the student have opportunities to initiate an interaction? When? With whom?</p> <p>_____</p> <p>_____</p>
<p>4. Do others in the environment understand and respond appropriately to the student?</p> <p>_____</p> <p>_____</p>
<p>5. Does the student have a means to engage in different functions of communication, or does he or she primarily make requests or protests? (List the different functions/purposes of communication and how the student conveys them.)</p> <p>_____</p> <p>_____</p>
<p>6. Does the student have different things to talk about? What are they?</p> <p>_____</p> <p>_____</p>
<p>7. Does the student have the means to respond to others and maintain conversations? How?</p> <p>_____</p> <p>_____</p>
<p>8. Does the student have a way and know how to end a conversation? How?</p> <p>_____</p> <p>_____</p>
<p>9. Does the student have a way to correct a communication breakdown? How?</p> <p>_____</p> <p>_____</p>

Figure 3.2. Interview questions for professionals and others interested in determining a student's communication skills.

student's communication skills is desired because many students appear to be more motivated to interact with peers rather than adults (Anderson, Balandin, & Clendon, 2011; Light, 1997). These same-age peers can be particularly helpful in identifying important topics of conversation and noting times and places throughout the day that the student needs support. For example, peers might explain that saying "rad" is outdated and his or her communication device needs to be updated with some more current phrases as well as additional subjects to talk about so the student can join in conversations during lunch and other social situations. Facilitating social interactions and friendship will be discussed in greater detail in Chapter 10.

WHAT SKILLS SHOULD BE ASSESSED? A COMPREHENSIVE APPROACH

Communication is complicated. Unraveling the different components of communication can help guide the assessment process by ensuring that the different features that make up communication are considered. The starting point for some may be to determine to what degree the student's communication is intentional; this step may not be necessary for other students. As previously mentioned, distinguishing between the student's receptive and expressive communication is important. Some students may have very few expressive skills but understand much more than what they can convey. The opposite may be true for other students. It is important to note the form, function, and content of the communication exchanges. Finally, gathering information about the student's social communication skills, including to what degree the student responds, initiates, repairs, and/or maintains an interaction, is important.

Preintentional and Intentional Behavior

A student's behavior in some cases may, at first glance, appear not to be communicative. For example, a child may make a slight movement, gasp or startle, hit an object, or make an unusual sound. The initial assumption may be that the behavior is not intended to communicate thoughts or feelings and is, in fact, preintentional or nonintentional. However, these unrefined behaviors may serve as the child's first attempts to communicate. The alert partner can respond to these behaviors, helping the student realize that such behaviors can gain someone's attention and convey a message. Nonintentional or preintentional behavior can become intentional in this manner (Meadan, Halle, & Kelly, 2012).

Once a behavior is recognized as an attempt to communicate, consistent pairing of a specific response to a particular behavior can teach the student that certain behaviors can be used to convey communicative intent. A student's behaviors (as obscure as they may seem) must be attended to and supported until he or she can acquire a more pronounced, clear, and obvious form of expression. The least dangerous assumption to make is that a student is trying to communicate. Therefore, a student's behaviors, regardless of their opaqueness, should be documented (e.g., facial expressions, movements, looks) and responded to, especially when that student is having particular difficulty getting a message across. Decisions about whether the behavior is in fact intentionally communicative can be made at a later date if important.

Receptive Communication Skills

Receptive communication skills include any behaviors that indicate an understanding of what was directed to the student. Understanding the message is demonstrated through the individual's response, which may be speech, a sound, a gesture, an action, or facial expressions. For example, a student who laughs when another student makes a funny comment should be credited with some understanding. A student who smiles and looks toward the computer shows understanding of a teacher's question regarding who wants to work on the computer. In addition, the following responses are indicators of a student's ability to receive communication. A student stops and turns to look at a teacher who says, "Hi." A student is presented with two options and asked what he or she prefers to do; the student looks at one

option longer than the other. A young child grins when teased by a classmate. A student returns to his or her seat when asked to do so.

The assessment of receptive communication skills also includes noting a student's response when asked to perform a specific activity. What does the student do to demonstrate that the message has been received and understood? In addition, what forms of communication seem to be best understood? In other words, did the student respond to the verbal direction to go line up for recess or to the gesture (pointing toward the door)? When asked what he or she wants to do, does the student respond more quickly when the options are signed along with oral language or when presented with picture choices alone? Does the student understand the direction to raise his or her hand when his or her name is called, or is this clearer when a touch is given to his or her elbow? In other words, assessors should note the method that is most effective in helping the student understand the given message.

Finally, noting how well the student performs an activity can provide considerable information regarding a student's receptive communication skills. For example, the assessor should note what parts of the task the student completes when he or she is asked to get his or her calculator out of his or her backpack. If the student opened the backpack and pulled out an electronic tablet, then this suggests that the student understood that he or she was to get something out of the backpack, but may not have knowledge of a calculator. If a student has a physical disability, then it may be difficult to completely ascertain a student's true receptive ability. In this case, the student may understand the direction but may not be able to demonstrate this understanding because he or she does not have the physical dexterity to open the backpack. The assessment process needs to be altered in this case. For example, the student may be shown two different pictures and asked, "Which one shows me getting my calculator out of my backpack?" In addition to noting what the student does, it is also helpful to record the latency between when the message is sent and when the student indicates understanding. Some students may need 5–8 seconds to process the information before responding. If they have a physical disability, then the latency period may be even longer (10–15 seconds). Noting this type of data is critical because it will avoid rushing a student by providing more information when none is needed. Looking for any indication of understanding is important, as well as assuming competence when in doubt (Dennis, 2002). The more environments and activities in which a student is observed will provide a more comprehensive picture of the student's receptive skills.

Expressive Communication Skills

Expressive communication skills include any behavior that is used to convey a thought. How the message is conveyed can vary from very clear and obvious to very vague and idiosyncratic. The student's intent to communicate may be questionable in some cases. Any attempt by the student to start, maintain, or end a communicative exchange should be recognized. Expressive communication is obviously closely linked to receptive communication because understanding what another person says is required prior to responding. The student who laughs at something funny demonstrates receptive understanding and at the same time may be trying to express, "That's funny." The student who pushes work on the floor may be trying to say, "I can't do this—it's too hard." The student who stands and stares transfixed at a large garbage truck could be making the comment, "I like the sounds garbage trucks make!" The student who grabs a teacher's hand and drags him or her to the window

could be trying to direct his or her attention to ask, “Do you see the squirrel out there?”

Different aspects of the student’s efforts should be documented when assessing a student’s expressive communication. How the student communicates (the form) provides important information regarding the student’s skill level. Why the student is communicating (function or intent) provides additional information, with the student likely using different forms of communication for different purposes. What the student talks about (content) gives the assessor information on the breadth of skills and/or accessibility.

Form Carefully analyzing a student’s current modes or forms of expressive communication is important in determining present skills and the need for further intervention. The form of communication is the way the student expresses thoughts, feelings, and needs. Students may use multiple forms or means of expression (e.g., facial expressions, gestures, vocalizations, objects). Some forms of communication may be effective for the student but not exactly conventional for the situation. For example, the student may grimace to indicate he or she is uncomfortable and needs to be repositioned. The student should be provided with an alternative way to communicate in order to make the student’s expressive behavior more universally understood, especially when the current form of expression is ambiguous.

Sensory impairments can significantly affect the communicative forms used by a given student; therefore, team members need to know how and what the student sees and hears. Vision and hearing specialists can share important sensory information that may help to explain why a student may use certain behaviors to communicate and not others. For example, a student may hear well enough for speech but needs touch cues and objects in order to communicate because of a severe visual and cognitive impairment. This same student does not use speech for expressive purposes but does vocalize certain sounds in different tones. He or she also uses facial expressions, objects, and touch. All modes of communication, as well as their effectiveness, need to be recorded so that intervention does not duplicate past efforts but works to add to the student’s current repertoire.

A student’s physical abilities also will affect what forms of communication will be most efficient and how the message will be selected. For instance, although a student may be able to relax his or her arm sufficiently to bring it down to his or her tray to activate a speech-generating device, the movement may be difficult for him or her and may require considerable time and concentration. Physical and occupational therapists can assess students’ physical abilities to determine how they can best make use of their bodies to communicate, the positions that will allow them to communicate most effectively, and any adaptations that may be needed. For example, Carl is physically able to produce some simple signs when he is in his wheelchair with head and trunk support; however, he is unable to produce the signs when he is prone on a wedge and must use facial expressions and look at pictures as alternatives.

Creating a message using symbols is another form of communication. Assessment information is needed regarding how the student gains access to symbols (whether objects, parts of objects, or pictorial). Direct selection occurs when the student directly indicates the symbol(s) via eye gazing, reaching, touching, or pointing. The direct selection method chosen should be the one that is most efficient in terms of time and energy. Touching or grabbing the picture or object would

be the quickest and easier form for one student, whereas directly selecting using eye gaze would be easier for another student. The student using eye gaze indicates his or her preference by looking at one of the three options presented for a concentrated period of time (e.g., 5 seconds). Scanning is required when a student is unable to directly select a message due to severe physical impairments. Scanning can be either visual or auditory (or both) and involves presenting different symbols in a sequential order. The student waits until the desired symbol (or message) has been presented and then indicates that choice by using a switch, vocalization, movement, or some other means. For example, a general education teacher asks a student to let him or her know what classmate the student wants to sit next to during lunchtime. He or she says each possible student's name, briefly stopping after each name to see if the student indicates yes with a vocalization of "ah." The teacher stops offering names when the student makes the vocalization, and the student is moved to sit next to his or her friend. The teacher may repeat the name (e.g., "You want to sit next to Emmy?") to confirm that he or she correctly understood the message. Another example of scanning involves a student using a leaf switch with his or her chin to operate a device that sequentially lights each message on his or her device until it comes to the desired message. He or she then activates the switch one more time to stop the scanning light on this particular message. Scanning generally takes longer to indicate a message than direct selection. One student may use both techniques depending on physical abilities, position, fatigue factors, and other such variables. Assessment of the form of communication should document how the student selects messages and if that varies throughout the day.

Function The function of communication is the reason or purpose for the exchange. Subsequent chapters use several functions of communication to describe intervention strategies. Although making requests and protesting the actions of others may be the easiest reasons to discern, each student has many other reasons for communicating. Those working with students with severe disabilities too often misinterpret many of these students' attempts to communicate as requests when, in fact, the students may simply be attempting to draw someone's attention to an item of interest and making a comment. Assessment that documents the reasons that the student engages in communicative exchanges will identify whether the student's communication is being limited. Both the student and the conversational partner may need support to engage in different types of exchanges.

Content The content of students' communication will change and will be determined by several variables such as interest, age, culture, specific conversational partner(s), and situations. For example, a student with a new toy to share with friends at lunch will most likely be talking about the toy. Another student who has returned to school from a camping trip with his or her family and has brought in photographs to show the class will most likely be interested in discussing this trip. Of course, this kind of situation is not always available. Typically, the possibilities of what the student may want to discuss are limitless, and providing the needed support (in terms of symbols to use) is quite difficult; however, interactions in which the student shows the greatest interest in communicating may provide some indication that the topic of conversation is important. The student may interact the most when a particular subject is being discussed; therefore, documenting the content of communication that seems to engage the student most often is important and can be used in creating AAC devices. If the assessment process indicates that

the student primarily talks about only one or two topics, then intervention efforts may be able to target increasing the breadth of the communicative content.

Initiations, Responses, and Turn-Taking

Finally, when assessing a student's communication skills, it is important to observe whether a student initiates the interaction, responds to another's comments, and maintains the conversation by taking turns. Students with severe disabilities are unlikely to initiate interactions and typically are placed in the more passive role of respondent (Blackstone & Berg, 2003; Iacono, 2003). Detailed information related to the conditions under which the student initiates communication is critical to understanding the student's skills. Rowland, Schweigert, and Stremel (1992) devised a means of closely examining interactions with children who have severe and multiple disabilities. Their assessment form provided a way of collecting data on the form, purpose, and content of the student's communication. Figure 3.3 is an adaptation of their tool and adds the number of conversation partners, number of turns taken by the student, and whether the student initiated or responded to the partner. In addition, the form enables the data collector to document the exact content of the interaction. By recording both what the peer without disabilities says and an interpretation of the student's communicative effort, a true conversation between the two (or more) students can be read down the last column. Transcribing the student's various forms of nonspeech communication into speech helps to remind the observer not to overlook the potential communicative intent of various forms of behavior. This type of interpretation may also aid in developing AAC devices for the student if needed. Figure 3.4 shows a completed observation form.

If you are unsure if the student's communication is intentional, then it is better to assume there is intent and put words to the message. You are helping the student make the connection between a given action and a given response (cause and effect). The communicative response is reinforced more frequently with repeated practice and, therefore, is more likely to become intentional over time. A second reason for doing this is to serve as a model to others who interact with the student. As they see you put meaning to a student's actions, they are more likely to do the same. For example, when Ariel starts to rock back and forth in her seat, her teacher responds by asking, "Oh, Ariel, are you bored?" Teachers can also prompt students without disabilities to interpret their classmate's communicative efforts by asking them, for example, "What's Ariel trying to say?"

HOW TO ASSESS

Communication skills do not develop in a vacuum. They are very much contextually bound. What is said, how it is said, and for what reasons are based on the setting, participants, and subject of any given interaction; therefore, a valid assessment of an individual's communication skills must occur within a typical communicative context (Beukelman & Mirenda, 2013; Kleinert, Green, Hurte, Clayton, & Oetinger, 2002). Individuals are most apt to demonstrate maximum communication skills in familiar and comfortable environments. Observing individuals in these environments provides a much clearer idea of how the individuals actually communicate. Structured observations can make note of both receptive and expressive skills, as well as most frequent communication partners, frequently recurring topics, forms