

Clinical Observation

A Guide for Students in Speech, Language, and Hearing

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To our families

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Introduction

PURPOSE

This text is written for the preclinical or early clinical student in speech-language pathology to provide focus to the observation hours (a minimum of 25 hours) required by the American Speech-Language-Hearing Association for certification. It can be used as part of a class in observation/clinical processes or as a self-guide to the observation process. All those involved in the training, whether as teacher or learner, want relevant and meaningful experiences. This text will give a clear direction for guided observations so learners will have a better idea of what they may be observing, why it is relevant, and how observations serve as a building block to their future roles as clinicians.

INTRODUCTION

While observing holistically and discovering what catches your attention can be appropriate, 25 hours of unfocused observation may not be making the most of this valuable learning opportunity. This text presents worksheets to use as you carry out your hours of clinical observation. Each worksheet is organized under three headings. Heading 1, “The Focus,” provides a brief knowledge snippet addressing one aspect of the clinical process. The focus is not meant to provide all the background available but rather to briefly highlight information you have learned in your prior courses. Heading 2, “The Activity,” presents the assignments you as observer are to complete. This may be a series of questions to answer, checklists to complete, or charts to construct. Answers are provided for self-check where

appropriate. Heading 3, “The Wrap-Up,” encourages reflection and prediction based on your observation and activity completion. This section is a lot like journaling. You are asked to consider what you discovered during the observation and how you predict those discoveries will influence you in your quest to become a speech-language pathologist (SLP). It is also the place to connect what you are seeing with the knowledge you have gained from classes, textbooks, and journal articles.

Activities may be completed more than once, and more than one activity can be completed for an observation. A variety of observations is needed to complete all the activities across the big nine areas of practice. However, it is also good to view the same clinician-client(s) working together several times to get a better idea of routines, change over time, and building of relationships. An observation log sheet is provided at the end of the book (see Appendix A) for a convenient way to keep track of your observational hours and the chapters you have completed

POINT OF VIEW

There are several convictions that influenced the development of this book. First and foremost is our commitment to developing intentional learners. The National Panel report by the Association of American Colleges and Universities in *Great Expectations: A New Vision for Learning as a Nation Goes to College* (2002) emphasized the need to educate students in the twenty-first century to be intentional learners—empowered, informed, and responsible. Among the nine skills that the National Panel identified as areas in which the empowered learner excels is, “deriving meaning from experience, as well as gathering information from observation” (p. 22). It is this skill base that each chapter of this book aims to build and support. Culminating in the final chapter, “Your Turn,” which directs each learner to take the chapter template and devise his or her own focus, activities, and reflection prompts and thus demonstrate his or her ability to be truly independent intentional observers, the completion of the book is not the finish but instead a start.

Second is our belief that the significant learning needed to prepare students to do speech, language, and hearing therapy must extend beyond content information. Clearly a knowledge base is vital but not sufficient in and of itself. L. Dee Fink (2003) identified his taxonomy for significant learning. Fink includes the dimensions of foundational knowledge, application, integration, human dimension, caring, and learning how to learn as the building blocks for teachers aiming to promote significant learning. Our chapters each begin with a reminder of knowledge-based material the learners have encountered in previous courses and then extends that knowledge to an application they complete during the observation. The reflection questions lead the learners to explore components of the remaining dimensions and to connect the observation to their individual past experiences and future desires.

Third is our certainty that what we as speech, language, and hearing professionals do and how we do it sets us apart as members of a distinct discipline. This discipline includes unique areas of practice reflected in “The Big Nine Areas” and “Supplemental Areas” sections and unique methods of practice reflected in “The Therapy Process” chapters. As Ehren (2000) noted in her article contrasting language classroom teaching with language classroom therapy, “therapy is a very specific, more intensive type of intervention, requiring focused expertise of the provider ...” (p. 221). The chapters introduce the learners to points of focus to center the development of their clinical expertise.

REFERENCES

- The Association of American Colleges and Universities. (2002). *Great expectations: A new vision for learning as a nation goes to college*. Washington, DC: Association of Colleges and Universities.
- Ehren, B. J. (2000). Maintaining a therapeutic focus and sharing responsibility for student success: Key to in-classroom speech-language pathologist in inclusive classrooms. *Language, Speech, and Hearing Services in Schools, 31*, 219–229.
- Fink, L. D. (2003). *Creating significant learning experiences*. San Francisco, CA: Jossey-Bass.

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SECTION

I

The Big Nine Areas

Articulation

THE FOCUS

When dealing with articulation, it is important to note that there is a natural progression of sounds, meaning that certain sounds come easier when they are in a particular placement. It is easiest to obtain sounds in isolation, move to the syllable level (consonant plus vowel), then to words, phrases, sentences, and finally, conversation. A client would not be expected to move to the next level until mastery at the current level is obtained (typically 80 percent or greater). There are several methods of reaching articulation goals. The two methods that will be discussed in this chapter are moving in a systematic order, working on one sound at a time, and working on various sounds at the same time.

Within the word level, it is important to keep in mind the vocabulary initial, medial, and final. These placements are exactly what one would assume—initial at the beginning, medial in the middle, and final at the end of the word. Typically, when a client is ready to work on sounds at the word level, the initial placement is the easiest. The client can get the articulators in place in order to produce the sound. The clinician could come up with scenarios or other treatment activities to target the sound at the initial word placement with various vowel sounds following the target. The next step in the progression would be the final placement, and once that level is obtained, the medial position could be attempted.

The next method is working on various sounds at the same time. Rather than waiting until a client has obtained 80 percent accuracy at a certain position and then moving on to the next position, in this method, sounds in several positions or multiple sounds may be targeted at the same time. Using this method allows for more variation in activities and in some cases may

allow the client to have mastery of more sounds faster than if he or she were to use the one-sound-at-a-time method.

It is important to keep in mind that articulation therapy is not always easy therapy. Many times the client gets bored or frustrated with trying to make the same sound over and over. The more opportunities for making the target sound correctly, the better, so be creative and come up with ways to incorporate the target sound into the entire session! One fabulous way of incorporating various activities is to use books in therapy. For instance, if a child is working on the /m/ sound, you could use the book, *If You Give a Moose a Muffin*. Do not stop with the book; make muffins with the child and take it another step by incorporating following directions and make use of the /m/ cooking words such as *mix* and *measure*. Make sure that your expectations for the client are realistic and that you are not concerned about sound corrections to errors that are not developmentally appropriate.

THE ACTIVITY

A. Crossword puzzle

Complete the crossword puzzle (**Figure 1–1**) using vocabulary learned in this chapter.

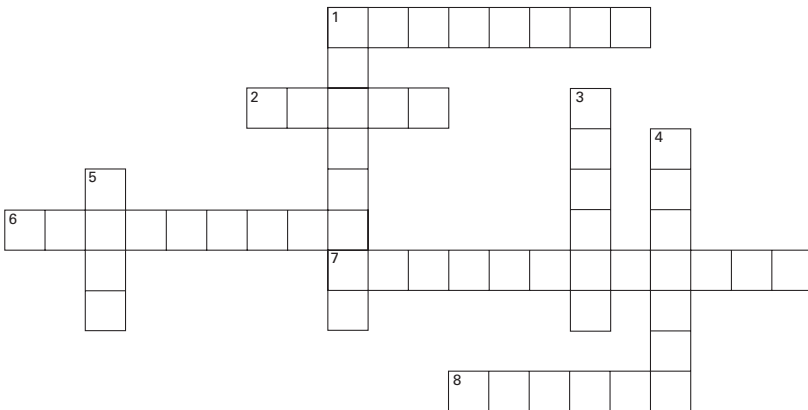


Figure 1–1 Articulation Crossword Puzzle

ACROSS

1. occurring as a CV (consonant plus vowel)
2. the end position in a word
6. the starting point for this type of articulation therapy
7. the final level for this type of articulation therapy
8. the last position to work on at the word level

DOWN

1. a complete thought (containing a subject and verb)
3. several 5 downs put together
4. the beginning part of a word
5. the step following 1 across

B. Important vocabulary

Define the vocabulary words provided and describe their relevance to the session you observed.

1. Initial:

2. Medial:

3. Final:

4. Isolation (with regard to sound):

AS YOU
OBSERVE...

- C. Think about the client you just observed. Was one of the two methods described in this chapter used? If so, what method was used and what sounds were targeted? Develop an activity for the client you just observed that could be used with either method.

THE WRAP-UP

▣ *Suggestions for Reflection*

When working with sounds in isolation, clinicians use mirrors to view those sounds that are visible when being produced, tongue depressors to pinpoint location of tongue placement in the mouth, and verbal description of what the articulators are doing while the sound is being made. Complete **Table 1–1** on the sounds /s, f, p, and r/.

Table 1–1 Sound Teaching Technique Worksheet

Sound	Should a Mirror Be Used? If Yes, Specify What Would Be Viewed.	Should a Tongue Depressor Be Used? If Yes, Where Would It Touch?	Should Verbal Description Be Used? If Yes, Specify the Place of Production of the Sound.
/s/			
/f/			
/p/			
/r/			

Speculate on why the medial position is the final part to work on at the word level.

▣ *Suggestions for Predictions*

How might therapy look different for a child versus an adult who may be working on the same sound?

Come up with an activity that could be used for a child (7 years old) working on the /l/ sound.

THE ANSWERS

A. Crossword puzzle

ACROSS

1. syllable
2. final
6. isolation
7. conversation
8. medial

DOWN

1. sentence
3. phrase
4. initial
5. word

B. Important vocabulary

1. Initial: Beginning
2. Medial: Middle
3. Final: Last
4. Isolation: The target sound produced alone or with no other sounds before or after the target sound.

Fluency

THE FOCUS

Everyone experiences problems with fluency at some point in time. We may occasionally have trouble getting a word out (block), have long pauses either before or during a word (prolongation), repeat a sound or word several times (repetition), or even talk so fast that our words become jumbled. Each of these examples represents a type of dysfluency. When these types of problems occur often or in conjunction with facial grimaces or other instances of body tension, people may seek assistance with their fluency. There are many different treatment options when working with clients who are experiencing issues with fluency.

One overarching theme is to make sure that as a clinician you are giving the client time to complete his or her thoughts. It is often very difficult to do this because as communication partners, we become uncomfortable when someone is struggling to be fluent. We sometimes attempt to finish the sentence or thought for the person who is struggling so he does not have to work so hard to say what we assume he is trying to say. While this is often a natural inclination for most people, it is very important to remember not to do this. The client must learn techniques to use when she is experiencing problems with fluency, and if you are finishing thoughts for her, not only do you run the risk of her becoming frustrated, you are not allowing her to implement controls that have been learned.

In treatment, you may see the clinician and client talking about recent events or instances during which the person remembers struggling with fluency. Although the clinician may be engaging in conversation, he or she should be keeping data or recording the session for review. The number of dysfluencies and the controls used are examples of data points that are

traditionally noted. The clinical supervisor may ask the clinician to keep other kinds of data as well.

As stated previously, there are many treatment methods to use with fluency. One method may be to teach the person how to use controls to move through a situation when he is not able to be fluent. Examples of controls include using easy onset speech—when you make sure you are relaxed (tongue, jaw, body) before beginning to speak, visualizing the word, and altering the rate or intensity of speech so the client learns control over his speech.

Another treatment option is to use delayed auditory feedback (DAF). Using this type of treatment, the client uses a device, which can be low-tech or high-tech, that allows her to hear her speech naturally as well as with a slight delay in what she said. Imagine hearing an echo but much faster than how you would normally hear that echo. This method gives the client additional auditory information that can sometimes aid in reducing the number of dysfluencies in a conversation. You may also see this in shared reading, where the client and the clinician are reading the same piece of information but the clinician is reading slightly slower than the client.

In fluency remediation, you want the client to experience the flow and feeling of fluent speech and DAF or choral reading can help provide this fluent experience. Fluency disorders may occur in children or adults. Generally, you will not observe a child earlier than age four or five. There are times in a preschooler's life when he goes through stages of normal dysfluency. These stages just mean that it is not out of the ordinary for a child around age 3 or 4 years old to have times when he repeats sounds or words. It may seem that the child is having fluency problems often, and many times this concerns parents or other adults in the child's life. Because these are normal stages, these children are typically not placed in therapy unless there are additional issues such as a high level of stress on the child's part about the fluency problem or the fluency problem being accompanied by facial grimaces or eye blinks. For the most part this stage passes by about age 5 or 6. When observing clients working on fluency, you will likely be seeing older children or adults.

Fluency treatment typically lasts for several years. The client may come in frequently to start and then change to only coming in once a week or even once a month for consultation. Sometimes these clients experience times when they seem to have more difficulty with fluency and may come in more often for assistance. There are many variables that can alter a person's fluency such as high stress, lack of sleep, and being in more demanding conversational situations. Fluency treatment does not follow the same course as other speech or language treatments that are discontinued once goals have been met. With speech problems such as articulation, when the client has mastered the skill, more often than not she does not need to continue therapy because she will not typically revert back to mispronouncing a sound she has learned to pronounce correctly. However, fluency is not something

a person never has to deal with once he has reached his goals. As circumstances change, the rate of fluency may also change, thus requiring him to enroll in therapy again.

THE ACTIVITY

- A. Rate the following scenarios using a 1 if the clinician is not assisting the client to learn techniques and a 2 if the clinician is assisting the client in learning techniques. Give your reasoning behind your rating.

Scenario 1. The client is talking about a class he is in and is being very fluent. He begins describing a situation that occurred yesterday and repeats the beginning sound in a word several times. The clinician sees the client is getting frustrated, and there is suddenly silence in the room. The clinician does not speak for about 45 seconds and then the client starts talking again about the situation that occurred in class.

Rating: ____

Reasoning: _____

Scenario 2. The client and clinician are talking about their favorite restaurants. The clinician begins telling a story about something that happened the last time she went to her favorite restaurant. The client seems very interested and the clinician talks nonstop for over five minutes.

Rating: ____

Reasoning: _____

Scenario 3. The clinician is reading with a client but seems to be a bit distracted today. During the shared reading, the clinician is reading

at a pace much slower than the client. The client has finished the sentence before the clinician gets halfway through.

Rating: ____

Reasoning: _____

Scenario 4. The clinician asks the client to describe a situation when the client has recently experienced several blocks in a conversation. The clinician can sense the tension in the client's voice and body language as the client begins to describe the situation. The clinician reminds the client about the controls that have been working for the client and then asks the client to finish her story.

Rating: ____

Reasoning: _____

B. What are controls, and what controls have been discussed in this chapter?

C. What is blocking?

AS YOU
OBSERVE...

- D.** The typical client or common occurrences were described in the focus section but the client you are observing may or may not fit this typical pattern. Answer the following questions about the client with fluency issues and the therapy that you observed.

- 1.** Fluency type(s) observed:

Repetitions _____

Prolongations _____

Blocks _____

- 2.** Grimaces or unusual body movements observed (please describe):

- 3.** Did the client's communication partner give the client time to complete his/her thoughts?

4. Controls taught or practiced:

5. Description of data taken:

6. Methods used to promote the experiencing of fluent speech:

7. Approximate age of client: _____

8. Age when this client was first seen in therapy: _____

THE WRAP-UP

▣ *Suggestions for Reflection*

In what ways was the client you observed unique? Is there a value in describing when each client will vary from that typical description in one or more ways?

While observing a fluency client, what types of dysfluency did you observe? Was this client successful in using controls? What controls did the client use?

Think back to a time when you have experienced problems with fluency. What were the conditions surrounding that particular conversation? Can you find a reason that you may have been dysfluent?

▣ *Suggestions for Prediction*

List ways in which you can communicate more effectively with someone who has problems with fluency.

As a clinician, how will you keep accurate data during a fluency session (review the data chapter)? What do you think will be the most difficult aspects of keeping data? What will be the most difficult aspects of working with a client with fluency problems? How might you encourage a client without talking for him?

ANSWERS**A.**

Scenario 1. Rating 2: The clinician should give the client time to finish. In some instances, it will seem that a long time has passed before the client continues but the clinician does not want to finish the client's thoughts just to make it more comfortable for herself.

Scenario 2. Rating 1: The clinician should never be talking more than the client. Although the clinician must engage in the conversation, it is important to be more client focused.

Scenario 3. Rating 1: The clinician must remain focused during a session. With shared reading and delay auditory feedback, there is only a slight delay between what the client has read and what the clinician is reading.

Scenario 4. Rating 2: The clinician sensed the anxiety of the client. It is important to remind clients about the controls that have been working and encourage them to begin in a relaxed state.

- B.** Controls are techniques that a client uses to increase his or her fluency rate. Examples of controls discussed in this chapter include using easy onset speech, visualizing the word, and varying the rate or intensity of speech.
- C.** Blocking is when a person is trying to articulate a word but no sound is emitted.

Voice

FOCUS

Your voice characteristics are so much a part of defining you as a unique individual. Friends identify you after hearing only a few words even over the phone. When voice disorders occur, remediation is essential. Voice disorders are often classified into the areas of loudness, quality, or pitch. The causes of all three categories of voice problems can be due to inappropriate use (functional causes) or structural damage or irregularities (organic causes). Most of us have experienced temporary voice problems in all three areas. Have you ever experienced loudness problems when you had laryngitis or a time that your voice was not as strong as it typically is and you felt as if you were straining just to be loud enough to be heard? Have you ever experienced quality problems when you had a bad cold with a blocked nasal cavity and had a denasal vocal quality (all your /m/s came out as /b/s)? Have you ever experienced pitch problems when your voice had pitch breaks or you spoke in a falsetto or unnaturally low voice?

When voice problems persist or result in pain or excessive throat clearing, the individual will seek professional help to return to normal or near normal vocal health. Before an SLP will begin treatment for a client with voice problems, the client will require medical clearance from a physician, most likely an ear, nose, and throat physician (otolaryngologist). This is done in order to make sure that there is no structural damage that should be taken care of before treatment begins or that certain therapies are not contraindicated. Some medical issues that may require further investigation and treatment by a doctor are vocal nodules, vocal polyps, paralyzed vocal fold(s), cancer of the larynx, reflux, or consistent drainage due to allergies. After medical clearance, the therapy may begin.

Voice therapy may consist of a variety of treatment options. Teaching the client to manage his voice by establishing healthy vocal habits is one component of voice therapy. If a client has the habit of talking too loudly or softly or talking in an inappropriate pitch or with insufficient breath support, the speech-language pathologist may help the client to identify times when he is using harmful vocal habits and substitute better ways of using his voice. It sometimes takes many reminders before the client can self-monitor. In these situations, it is important for the clinician to interject and give the client helpful hints on using better vocal habits. If a client does not stay hydrated and is in a position when she must talk a lot or use a louder voice (such as a teacher), the speech-language pathologist may help her come up with a plan to drink more water during the day to keep her throat moist or to employ a microphone to avoid straining her voice to be heard. Smoking, consumption of alcohol or caffeinated drinks, and straining the voice should be avoided and the client should be encouraged to practice good vocal hygiene.

Another common therapy technique is using computerized software such as the Computerized Speech Lab (CSL, KayPENTAX), which allows the client's voice to be recorded and the client to have a visual representation of his voice. The CSL has features that allow the client to see what pitch he typically uses, which can be compared to norms to see if he is speaking at a pitch that is too high or too low—either of those can cause vocal strain. The CSL also provides the option of seeing how long a client can sustain a certain sound (such as /a/) before his voice gives out. The CSL is a great tool that can be used so the client can not only hear his own progress but see the progress as well. Many of the software companies have games that are included in the software so the client is not just performing tasks and getting a visual picture of her voice, but she is able to participate in games that reinforce appropriate use of the voice. An example of a game that a 15-year-old client focusing on pitch modification enjoyed was the cat and mouse game on the CSL. In this game, the client must raise or lower her pitch in order to move the mouse across the screen to various pieces of cheese. A cat comes out to chase the mouse and the client has to raise or lower her voice faster and for longer periods of time to avoid the cat. While these games are great for kids, they are also enjoyable for many adults and provide them with a way to monitor their voice in a visual format. If the treatment facility does not have these types of computerized programs available, treatment can be done by tape recording the client in various situations and playing it back. Often times, the client cannot detect changes in his voice when it is happening, but if he hears himself in a recorded format, he can indicate when changes occurred and what may have been the cause of that change.

Some breathing techniques may be taught to clients with vocal problems as vocal support is a necessary component of voice production. Clients with Parkinson's disease often have a very breathy quality voice and speak very softly. These clients lose muscle tone and may have to learn to retrain their

brain and body when speaking. Many times, these clients need to be taught how to take deep breaths and speak on the exhalation. The deeper breath they take, the more force they can use when speaking. Clients may have to take more breaths than they once did when speaking in order to help provide power to their voice.

Regardless, the type or cause of the voice problem, counseling will likely be a part of therapy to help the client embrace a modified vocal characteristic. Clinicians need to be sensitive to the personal identity aspect of this treatment and the difficulties involved in generalizing the gains made in therapy to all aspects of an individual's life.

THE ACTIVITY

- A. Determine what the client is doing incorrectly and give recommendations to the client.

1. A client with a strained voice is in the waiting room talking to a family member. You want to see what progress the client is making with self-monitoring so you stand out of sight and listen to the conversation. You hear the family member ask the client a question and the client responds with a two-minute answer that starts out strong but quickly changes to a whispered voice.

2. It is 4:00 p.m., and you are asking the client what she has had to drink today. The client reports that she has had one cup of coffee and one 8-ounce can of soda.

3. You are getting ready to see a client who has been making progress and has been talking in his normal frequency (this particular client did not like the sound of his voice and he always tried

to use a lower frequency voice than was appropriate for him). The client called to say he was running late and you thought it was his dad calling.

- B. Develop an activity to help an adult client who talks using a very high pitch. Explain the rationale for the activity to the client in sufficient detail. This client has been diagnosed with vocal nodules and the goal is to have the client be able to independently monitor her pitch and loudness level use in a typical conversation.

AS YOU OBSERVE...

- C. Answer the series of yes/no questions provided in **Table 3–1** concerning the voice session you are observing by putting a check in either the Yes or No column. For every Yes answer complete the last column by providing a detailed description with at least one specific example to support your Yes answer.

THE WRAP-UP

▣ *Suggestions for Reflection*

What factors make it so difficult for clients to get to a point where they can appropriately self-monitor and change their voice when needed?

Table 3–1 Voice Observation Checklist

Question	Answer Yes	Answer No	Description/Example if Answer Is Yes
1. Is the focus of remediation loudness?			
2. Is the focus of remediation pitch?			
3. Is the focus of remediation quality?			
4. Is the cause of the voice disorder functional?			
5. Is the cause of the voice disorder organic?			
6. Were healthy/unhealthy vocal habits discussed?			
7. Was a visual display of the vocal output examined?			
8. Was an audio recording made and evaluated?			
9. Was a motivator/reinforcer used?			
10. Was breath support monitored?			
11. Was a counseling focus evident?			
12. Was generalization of gains beyond the therapy room included?			

Identify a situation you have been in when you strained your voice. What were you doing? Did the vocal strain last or did it go away quickly? Did you do anything that helped your voice? If so what did you do? List some recommendations you could give a client with a hoarse voice.

▣ *Suggestions for Prediction*

Explain why it is important to get medical clearance before beginning treatment with voice clients. What do you do if a client refuses to see a doctor? Can you have him sign a waiver or would you refuse services? Why or why not?

List some reasons a child or teenager may have voice problems. Would your therapy differ from that for an adult? How would the therapy be different and why?

ANSWERS

A.

1. The client is not self-monitoring; you could record a conversation with the client and have him listen to it and critique himself. Note that using a whispered voice is not a good solution. Whispering does not decrease the strain put on the vocal folds.
2. The client is not staying hydrated. Help the client develop a log she will use to write down how much fluid she drinks every day for a week.
3. The client is not talking in his fundamental frequency outside therapy. Use the CSL or record the client using various pitches to see which one the client thinks is most appropriate. Help him to identify the frequency that is the best for him.

- B.** You and the client could read a magazine article and discuss it. Record the conversation and rate the conversation independently, then compare notes to see if the client is able to compare her voice to yours and identify times when she could have altered her voice or the conversation to accomplish her goal.