

## **Dr. Beattie – Communication Disorders part 1 – Transcript**

The next chunk of information that we are going to look at deals with and considers communication disorders.

\_Slide 1\_

Communication disorders are basically the area, content, skills and so forth that a speech pathologist deals with on a consistent basis. My guess is that a few people in the room have worked with one at some point in time if you substituted one sound or another. You talked about wabbits as opposed to rabbits and if you were likely to talk like Sylvester on Sylvester and Tweety with a lisp. Again, my guess is that several of you have worked with someone like that in some size, shape or form. It is a wonderful field, a wonderful area to be involved in. Um, I think I have said previously that if you are a SPED major you can get a job tomorrow. If you are a speech pathologist you can get a job yesterday. There is a shortfall of speech pathologists in a variety of different settings. In the public school setting, hospitals, clinical situations where they do private work, and I have mentioned ABC Private Practice that I am involved in. They have three to four speech pathologists who work with us in that setting. It is a great field, a wonderful major. The frustration is that we don't have that major here so you have to go someplace else.

Lets go ahead and talk about this broad term of communication disorders.

Communication disorders is that element of SPED that looks at both or either speech and/or language disorders. They are two different things. I guess it is a pet peeve that, my masters is in Speech Pathology and I worked as a speech pathologists for a couple of years before I went back to grad school but speech and language are often used interchangeably but they are very different things and will we talk about that in a second. Remember that it involved both speech and/or language.

Again we won't go into the specifics of the North Carolina definition but I want you to be aware of a few of the key points from our perspective that exists in the definition we use in North Carolina.

\_Slide 2\_

When a student or a pupil has been diagnosed with having a speech or language impairment that person or student exhibits a disorder in articulation, language, voice, and/or fluency.

Back up for a second, North Carolina refers to a communication disorder as a speech and language impairment

State of NC also recognizes that a kid may have a communication disorder, speech and language impairment by itself which is the primary thing or that disorder may also occur with some other type of disability. It may be secondary to other disabilities. The primary

thing means it is the only disability the child has. If it is secondary it means the kid may have learning disabilities and also have a speech and language impairment. It may be by itself or the second disorder/disability that a kid exhibits.

### \_SLIDE 3\_ IDEA

IDEA, this is in your book as well, defines a communication disorder and you will notice the similarity between this and the states definition. Communication disorder for example stuttering, impaired articulation, language impairment, or voice impairment which is essentially what the states definition is all about.

This communications disorder, as we have said repeatedly so for this semester, that disorder has a negative impact on the kids education performance. It calls attention to itself, it is different, it causes that child to have some difficulty in school for a variety of different reasons.

### \_SLIDE 4\_ Typical Development of Speech and Language

Don't write this down it is just information that you aren't so much going to see in a school situation but if you are working with kids birth to six months. Just general information for yourself or anyone else around you who has kids. Kids birth to six months communicate through smiling, crying and babbling. So if your kid is obviously up to six months of age you should not expect this kid to be producing sounds or words. The babbling is definitely sounds that go together. So what they do to communicate what it is that they want they smile, they cry or they babble. They smile when you give them something they like and they get pissed off and cry when you won't give them something they want and they babble as you continue to say things to the kid and the kid tries to mimic that.

Seven months to a year differentiated babbling, it is still babbling but it is for a purpose. PaPa instead of paper and the kid consistently refers to it for something repeatedly.

A year to a year and a half, by one year of age the kid should be able to produce his or her first word. That vocabulary will increase dramatically. Remember these are just general guidelines. If you kid turned one today and still has not said his/her first word do not get too upset about it. That will happen, if the kid is two it is different circumstances. These numbers can be misleading at some levels.

A year and a half to two a large amount of growth as far as word production is concerned. Kids are exposed to things and their vocabulary multiplies dramatically in that half year.

Two to three years kids start to talk in sentences. Their vocabulary grows and kids that this age are specifically large pains in the butt. Partially due to the fact that they can now talk and tell you what they are upset with, what you are saying is wrong, and they learn the word no so all of the sudden life as we know it changes dramatically. You have heard of the terrible two's, I'm convinced that the three's are worse than the two's and I think it

is partial to this language stuff. When they are cute and crawl and don't say anything life is wonderful. When they start to talk you want to have that surgery so that there won't be these little rascals running around. Matt was two when a surgery took place.

#### \_SLIDE 5\_ Speech

The technical definition is the behavior of producing a language code by making appropriate vocal sound patterns. What that means is that speech is the production of sound that basically allows us to be able to communicate with each other because it follows that language code. We know that when we put that sounds "c", "a", and "t" together we have the word cat. We understand that it means something different than cut. We recognize that speech is simply the production of the language code so if you have a speech disorder something is going on preventing you from creating the sounds accurately.

#### \_SLIDE 6\_ Respiration...

This next stuff is boring and I apologize and we will get through it quickly. Speech is produced by basically using four different things. Sounds are the product of four separate processes. Every time you speak and create a sound you use these four.

The first process is respiration. We all know it has something to do with breathing. Relating to speech, respiration is the provider of power or power source for the production of speech. IF you have had formal singing training, you basically learned how to breathe and hold air in your diaphragm and use it to create different notes.

The second process is referred to as phonation. That is where you use your vocal chords to help produce, shape, whatever sound. Put your finger on your Adams apple and say "s". You shouldn't feel any vibration. If you do you should see the speech pathologist. That vibration comes from your vocal chords. Anybody know what vocal chords are? They are essentially cartilage and form a V. As they move back and forth they shoot the air up. They essentially help you with the frequency of a sound. A high pitch compared to a low pitch. If you stretch a rubber band and then pluck it, would it be a high or low pitch? If it were taut it would be a high pitch. If you scrunched it, it would produce a low frequency sound. Females tend to have longer vocal chords than men.

The third thing is referred to as resonance. We breathe, we pass the air through our vocal chords and now we get to the throat, the mouth and the nasal cavity which allows for the quality to be shaped as we produce sound.

#### \_SLIDE 7\_ Speech Disorders

When we look at speech disorders, we are looking at the individual child's production of speech in relation to peers. The child's speech is impaired when it is so different from

the speech of others at the same age that it does certain things. The same age is important because it is developmental. Three year olds aren't supposed to say as much as a seven year old. A seven year old should not say as much as we do. We compare apples to apples, kids with other kids of similar age. So it is impaired if it calls attention to itself. If when you hear this kid produce speech you don't understand and do something different because you realize you need to change it and it calls attention to itself. We have kids who have articulation errors and they produce sounds inaccurately and that calls attention to the sounds they are trying to produce,

The second thing is that it interferes with communication. How might this happen? As the receiver you might not be able to understand which interferes. Kids with many speech disorders are less likely to use speech to communicate because they know that there is something wrong with it and they have been made fun of or asked to repeat because people do not understand.

The third thing that can be involved in a speech impairment is when that impairment causes the speaker or listener to become uncomfortable. This is not the only example. Someone that stutters and getting frustrated because want to say word for them. Can make both people uncomfortable. Stutterers have tension in neck and face. Or after two says any of these can be in place.

#### \_SLIDE 8\_ Types of Speech Disorders

First type of speech disorder is referred to as an articulation disorder. We talked earlier about that fact that articulation is one of the four processes involved in producing speech, it is the formation of sound. The kid has an articulation disorder if something happens a malfunction happens or improper use of muscles, nerves or organs. If it occurs then there is an articulation disorder. The tongue, the teeth, the roof of the mouth are all articulators, all are used to produce sounds. If something happens with the muscles, nerves or organs it causes the kid to produce sounds inaccurately. It results in four different problems.

Just as you would suspect given the term substitution, one sound is substituted for another sound. The w for the r the wascally wabbit is an articulation disorder that is a substitution.

There are also distortions. A distortion results in the production of a non standard sound. The most prevalent distortion is a lisp. I don't know if I said this earlier. Sometimes the world is a cruel place and sometimes we make it cruel. The term lisp is a very difficult one to say.

The next type of articulation disorder is omissions, kids leaving sounds out of a word.

The last one is the opposite, additions, when you would add sounds.

Substitution is the most common and omissions and additions are the least.

The first type of speech disorder is an articulation disorder and there are four types or articulation disorders.

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The second type of speech disorder is a fluency disorder. Fluency involves the smooth production of speech and when it is disfluent it is not smooth. It is the interruption in the flow of speech marked by a typical rate, rhythm, and repetitions in sounds, syllable, words, and/or phrases. The rate, if you know stutterers, the person speaks very slowly. It is an intervention used to avoid repetition in sounds. The rhythm is affected by the creation of that disfluent moment when the person repeats that sound and then the repetition is present as well. Stuttering is the most common fluency disorder. Stuttering is frustrating because there is no known cause. There is assumed to be a biological cause but no one seems to know. There are not many therapy techniques that are effective but there is some positive technology coming out. There is working being done to help the people here what they say while speaking to reduce the amount of studying. The research is relatively new for that kind of stuff. ECU is doing a lot with stutterers.

Third type of speech disorder is referred to as a voice disorder. A voice disorder occurs when there is an abnormal production and/or absence of vocal quality, pitch, loudness, resonance and/or duration. The quality, not raspy. How high or low the pitch is. How loud the sound is. The resonance occurs and how long we are able to sustain speech. Any problem in those areas would result in a voice disorder. A couple of examples that are interesting. We talked about the system that allows us to speak is a closed system. The hard and soft pallet have grown together and when there is a hole for the soft pallet which results in a cleft. Instead of there being a close, vacuum system when someone with a cleft pallet speaks, air escapes through the cleft on the roof of the mouth. That cleft pallet results in a voice disorder that can be treated in a couple of ways. A ball can be attached to a wire and fill the whole so the person can speak. Surgery is also an option by taking a skin graft and covering the hole with it to make sure no air escapes.