Intro to SALT and LSA Basics

Part 3 – Case Study (Cyanna - Compare to DB)

So, let's go on to analyzing a sample using a SALT Database. This is the most fun about SALT. When you get a SALT sample back, what can you do with it? This is a student. If you look on page 2, you'll see her transcript, and I'll open that in a second. I'm going to pull up SALT, and here's Cyanna, and her language sample, which is a little hard to see, I think. If you want to look at page 2 of your handout, I think you can see it better there. The first thing I always do when I get back my language sample is I listen to the audio while I'm reading the transcript. At that point, I always make any corrections that need to be made. The transcriber might not have known the child as well, and might not have understood what they said, or, whatever. So, I make any changes at that point.   I'm going to let you listen to Cyanna.   I'm going to tell you a little bit about her first. Cyanna's a 3rd grader. She's been in speech and language since kindergarten. She was a student of mine. My student teacher did the sample with her. She had some articulation problems. You'll hear phonological problems. But she's much more intelligible now, here in 3rd grade, than she had been. She's got some dialect problems. So, you can see on here the D stands for dialect, so that's coded. Also, EW is error at the word level. EU is error at the utterance level. NV is nonspecific vocabulary. So, those are all coded in here. I want you just to listen to her. Then, I think, when I play the audio, you're going to have to look at your handouts for her transcript. Okay? So, here's Cyanna.

C: Hello my name is Cyanna. We go (laughs).

E: Okay. Cyanna! We had a Snow Day last week. Tell me about what you did on the Snow Day.

C: When we went home, I played in snow.

E Aw! Did you make a Snowman, or did you go sledding?

C: What day that?

E: What's that?

C: Which day?

E: Thursday, on the Snow Day.

C: After Valentine's?

E: Remember on Thursday, there wasn't any school?

C: Mhm.

E: What did you do that day?

C: Can we talk about Valentine's?

E: We can talk about Valentine's Day. What did you do on Valentine's Day?

C: I, oh, I got a- On Valentine's Day I got, um, some candy, some notes and stuff and a Teddy Bear, a Built-A-Bear (with) some clothes on her. I get to pick where I get to out my, uh, clothes up.

E: (Aw)!

E: Aw! You went and made a Build-A-B ear? Oh, (that is so cool).

C: (I picked up some) shoes, hats and stuff, some winter shoes and stuff.

E: Wow. So, tell me, what does your bear look like?

C: She's a brown- She's a bunny. I wanted her to be a bunny.

E: Oh, that is so cute.

C: You can make them all different kinds. You can make all different kinds. You can make Red Nose the Frosty, wait- Red Nose, wait- Frosty the Snowman, and Frost Red Nose the…

E: Rudolph.

C: Rudolph. Um, you can make Santa, wait- I mean, you can make… You can make a rabbit. You can make…

E: You can make a frog. Not a frog?

C: Uh, yes!

E: You can?

C: With babies.

E: Huh!

C: And then you can dress them.

E: Oh!

C: And then you have a, a pond. So, the frog can be in it.

E: Huh! A pond for your frog to (swim in).

C: (And then) you can put some clothes on the frog, and some shoes.

E: Oh! That sounds so neat! Who went with you to make your Build-A- Bear?

C: I got the money, um, on the 1st.

E: Mhm.

C: That's when we get paid. And my mo, my mom went to take me there. And her birthday on the same day I went to go take, to get one.

So, there is Cyanna. And you kind of get a little feel for what she talks like, and what this sample sounds like, and you get a little idea that she's got a few issues. In my head I kind of think in my head, "Gee, what's going on there? What do I want to look for? What do I want to do?" So, first I like to look at the Analyze Menu, up here, and I like to go down to Transcript Summary and just look at the child and myself and just see, "Did I ask too many questions?" You can see here there were some questions asked, but not too many. "Did I interrupt too much?" "Were there a lot of questions?" "Did she have too many yes/nos?" Not too many yes/nos. She had answers to questions. "How many utterances with mazes?" Wow, that's a lot. You know, just try and get a feeling for what was going on in this sample. The next thing I like to do is look at the Database Menu. We'll go up to the Database then, and we want to also select the Database Comparison Set. What do we want to compare this kiddo to? So it's going to automatically come up with conversation, and the sampling conversation is going to come up here. We want to come up with "Same Number of Words," or "Total Utterances." And I want to come up with the Total Utterances. Or you could do the entire transcript, whichever you want. On Cyanna, I'm going to do Total Utterances. Then you're going to hit "okay," and it's going to say there are 42 participants. Well, that a good database to compare to, so I'm going to say, "Okay." So, now I go to the Database and I want to do the Standard Measures Report. That's pretty much the standard way everything's going to come up in there that we need to look at for just the basic measures. It's working here, comparing. Here It is. Here's the child. Here's the database, the mean, the minimum number in the database, the maximum and here's the standard deviation. Now here it's going to tell you the score the child had, plus or minus the standard deviation. One thing to remember is it may be plus or minus. You need to take that always and know whether that's a good or a bad thing. For example, say total utterances was 130, and that's above the standard deviation. Well, that's not a bad thing, so you don't want to say, "Well, she was above the standard deviation on that, and that was a bad thing." You want to make sure you really think about what that means if something comes up starred. If there's one star, it means it's one standard deviation. If it has two stars, it means two or more standard deviations. It's shaded in, too, and that gives you a clue here. So, the Total Utterances in Complete and Verbal match the mean. Total Completed Words is one star, and it's 1.8 standard deviations above, but that's above the mean, so that's not a bad thing. So, she talked a lot, but she had a lot more time, too, to get those words in, then what the mean normally is. So, it took her a lot of time to talk to get this sample in. Her MLU was

at the mean, within standard deviation, for words and morphemes. In the semantics part of the standard measures, though, here's where something interesting's happening. She's got two standard deviations or more. She's got, actually, four standard deviations below the mean for Number of Different Words. The mean is 230, and she's at 163. That's actually even below the minimum number in the database, so the number of different words that this child's using is really low. She's got a very, very low vocabulary. She's not using hardly any different words at all. Her vocabulary's low, and hence, her XX ratio's going to come out very low. So, you want to be aware of that. Low vocabulary, we've got, right now. Her Discourse, she's interrupted the other speaker three times. That's a lot. She's not paying much attention to the other speaker. That's a really good thing to notice, too. That's very typical of Cyanna. She doesn't pay much attention to the other speaker. She just keeps talking. Number of Maze Words, 137, and the mean is 75. She is 1.4 standard deviations above the mean. That's a lot of maze words. So, in that maze, she's using a lot of words. Comparing Maze Words to Total Number of Words is 17 percent, kind of on the average. Anything above 10 percent is usually a lot of maze words. And she's abandoned a lot of utterances, which is also above the mean, quite a bit. So, here's this kid with low vocabulary, a lot of interruptions, a lot of abandoned utterances, a lot of mazes. What else is going on? Verbal Facility and Rate, she's got a lot of within utterances pauses, probably going along with the mazes, trying to find out what word she's trying to find out what word she's trying to find in there. Her Within Utterance Pause Time, 50 seconds. Usually it's only eight seconds, so she's got a lot of pausing going on in there. Between Utterances Pauses, she's got eight of them, at 50 seconds. Again, usually there's only 15 seconds. So, even between utterances she's having some pauses, and I think you heard that in there. She's trying to find some words within those pauses. She's trying to remember them. You know, "Rudolph the Red Nosed Frosty," or whatever she called him. She's quite endearing, actually. She doesn't omit words or bound morphemes, so morphologically she's good, but she has words at the error level, and errors at the utterance level. She's just got some real problems formulating her words. So, looking at these things, let's spend a little time looking at some other things involved. We've looked at this. We want some further investigation to check out those things, the maze, the rates, the omissions, those utterances with codes. Let's check those things out. SALT can do that for us. So, let's find out how we can do that. The first thing, and this is also in both of your handouts, so you can look at both your handouts and check it out, let's go to the Database Menu once again, and bring it down. You can look at Maze Summary. And once again, you can see the number of maze words here, in the comparison, and that's the same as in the Standard Measures Report, this is all the same, but here, it breaks it down and expands it. It tells us she's got 4 part-word revisions. Well, that's interesting, but here's what's more interesting, she's got 26 phrases that she's revising. That's huge. Look at the mean. It's usually 11, and she's got 26. So, in those phrases, she's kind of flailing around in there trying to figure out either what word, or how to put a sentence together. What is she trying to do in there? And you're going to want to go back to the sample and figure out what she's trying to do that she's revising so much. She had some Part-Word Repetitions, which are high. And she's got Phrase Repetitions that are high. So, her mazes are really a good example of some word-finding and formulation problems that she has.

The other thing that we want to look at, and we can do this in the Analyze Menu, is we want to look at her Rate and Pause Summary, because she had so many pauses. This is the other data that was already

in there, in the Standard Measures, but here it shows the number of pauses, 2 in the main body, but within her utterances, but in the mazes, she had 7. Then, it shows the timing of all of those. So, she's really 21 seconds, this is between her and the examiner, and this is in 9 seconds, in her own utterances. So, she's really struggling a lot to find things, and she's taking a lot of pauses to do it.

We can also look at those omission and error-codes. We want to look at the first speaker. Here it shows what the errors were. She uses the word "all" for "some," "and" for "with," glittery" for glitter," which is not that bad, "Halloween" for "Christmas," "Red Nose the Frosty" and "Snowman the Frosty" and "up" for "out." Then it gives you the actual sentences, or utterances they're in. So, that's really nice. You don't have to go through the entire transcript to find them. Here they are. Then it gives you the Error at the Utterance Level, also. You can find these things in here, and you don't have to go back through the entire transcript, which is really nice.

Then the final thing you can go through and analyze is, you can look at the Standard Utterance Lists, and you can go through and see the things that were coded, and it gives you all of those codes. So, you can look at dialect. You can look at the Error at the Utterance Level. And you can look at Error at the Word Level. You can see what she's doing. You can look at the Non-Specific Vocabulary. You can see what she's doing. So, you can see her saying, "Can you make Red-Nosed the Frosty?" "Can Frosty Snowman the Frosty Red-Nosed the…" You can just see how she's trying to figure out how to say, "Rudolph the Red-Nosed Reindeer," and she's got that so goofed up with "Frosty." And you can see how she's got Halloween, and Christmas and Valentine's all goofed-up, too, when you're looking through those utterances. Then you can go back and look at some of these things in her sample and read them that way, too. All these things are in your handout. All these things give you an idea of possible goals to make for Cyanna. What things do you want to set up for Cyanna? Well, I looked at that and said, "Wow, she's really got some vocabulary issues there that she needs to work on." And I chose to work on vocabulary diversity within the academic setting for her. So, I looked at her Science and Social Studies and Reading, and talked to the teacher, and worked on whatever Science Unit, or Social Studies Unit and their vocabulary. Worked on those in the therapy setting. Then, I went into the classroom during Science or Social Studies time, to generalize it, to remind her of those words. We give her clues, and give her pictures and different things, cues that we use, so she would use those words during those times, so she could generalize them. We worked on reducing mazes and improving utterance formulation and improving grammatical structures- those kind of all went together. And then, we were looking at some word-finding strategies for her and helping her with that. She made some nice progress, and I could use SALT to measure that again with her. She's in 6th grade now. She's in middle school, so I haven't seen her lately, but she got to be a pretty good talker.

So, I think SALT really enables you to diagnose oral language issues in the natural setting, and then plan these very effective therapy goals. Some really short sample times yield very vast results. You can correlate SALT to any other testing you're doing, to teacher and parent reports, to classroom functioning, to academic achievement. And then, further samples in different conditions can be elicited at any time. With Cyanna, we went back at the end of 5th grade and I did a Dr. DeSoto with her. And her storytelling had improved greatly because we worked a little bit on that, too. So, I think that's all really excellent things for showing the progress that a child can make