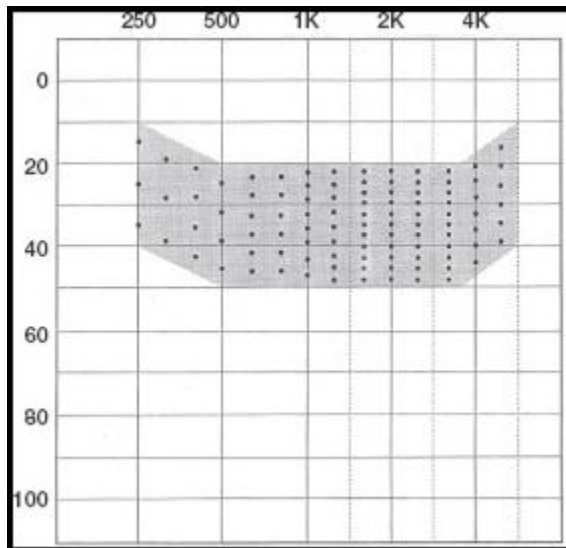


Quick Ways to Understand the Impact of Hearing Loss

The Count the Dot Audiogram takes research about speech sound acoustics and represents it as dots on the audiogram. Each dot represents 1% of acoustic energy of speech. So the louder low pitch speech sounds have more dots and the very quiet high pitch sounds (s/t/etc) have very few sounds.



Insert the child's best hearing thresholds at each of the frequencies and draw a line for the best hearing threshold for the speech spectrum. Count the dots below the hearing threshold. This would result in the percent of speech energy that is audible to the child. This doesn't mean that it will be the same as a child's FLE score. When children listen to words or sentences they bring their knowledge of language and 'fill in the blanks' for speech sounds that are not audible or at the detection level. I compare this to having a 100 piece puzzle you need to put together. If you only have 65 pieces of the 100 the puzzle won't be complete. If you put a big picture on the puzzle

then the image may still be recognizable if you have only 65 pieces. If instead you have a story written on the puzzle and are missing 35 words, you are not as likely to understand the story. So audibility is like having a blank puzzle. Doing the Functional Listening Evaluation provides some information about how well the child comprehends with the number of pieces he has available. The stimuli used to perform the FLE will tell you different things about comprehension/audibility. If nonsense syllables are used then there is no 'help' from language and you are verifying audibility. If you use sentences (which I recommend) then you are getting at how well the child can access speech overall in a classroom. People like to use this handout to explain FLE results <https://teachertoolstakeout.com/1178-communication-repair-strategies>

The thing to remember is that the Count the Dot Audiogram is based on conversational speech, with an average of 45 dB input. When I created the Speech Audibility Audiogram for Classroom Listening I adapted the Count the Dot Audiogram for a 35 dB input (listening to soft speech or peer answers across a classroom) and 50 dB (softest speech sounds perceived in 'teacher speech'). <https://teachertoolstakeout.com/0391-topical-articles> If you have the *Building Skills for Success in the Fast-Paced Classroom* book it is explained more (chapter 2 I think).

The Impact of Hearing Loss on Listening, Learning and Social Interactions handouts use audibility information mixed with statements about function and can be very useful when getting across the impact of hearing loss, whether the child has a mild loss or uses hearing aids/CIs consistently. They will still have reduced audibility.

<https://teachertoolstakeout.com/0638-inservicing-school-staff>

I hope that this clears up your questions Kristi. The Count the Dot Audiogram is simply a tool to aid in understanding audiogram results. It along with the FLE can be very powerful.

https://journals.lww.com/thehearingjournal/fulltext/2010/01000/Twenty_years_later_A_NEW_Count_The_Dots_method.3.aspx