

Lesson plan for the patient who wants to understand the speech of an FCP (staged in over time). The voice designation of “M/F” stands for “Male or Female” and means that the patient should train with the generic voice type that is the same sex as his or her FCP.

Note: this lesson plan is appropriate for patients who have an FCP who does not want to record the training stimuli in a single session. FCP should record the stimuli in 3 sessions:

Before Week 1, session 1: Stimuli for pEARl Crunch, ShakespEARe

Before Week 7, sessions 2 & 3: Word stimuli

Week	Games	Voices	Comments/Notes
1	* EARonaut, adjust noise to preference	M/F	
	* pEARl Crunch, in quiet	FCP	
2	* ShakespEARe	FCP	
	* MountainEAR	M/F	
3	* pEARl Crunch, in light noise	FCP	
	* FarmEAR in the Dell	M/F	
4	* ShakespEARe	FCP	
	* Treasure EARland	M/F	
5	* pEARl Crunch, in high noise	FCP	
	* EARonaut, in light noise	M/F	
6	* pEARl Crunch, in high noise	FCP	
	* ShakespEARe	FCP	
7	* MountainEAR	FCP	
	* FarmEAR in the Dell	FCP	
8	* Treasure EARland	FCP	
	* EARonaut, in high noise	FCP	
9	* MountainEAR	FCP	
	* FarmEAR in the Dell	FCP	
10	* Treasure EARland	FCP	
	* pEARl Crunch, in high noise	FCP	
11	* ShakespEARe	FCP	
	* Patient's choice	FCP	
12	* Patient's choice	FCP	
	* Patient's choice	FCP	

	Goals	Tips
Week 1	<p>Play EARonaut at least 10 minutes twice this week with a talker type that is the same sex as your FCP with the noise adjusted to your preference.</p> <p>Play pEARl Crunch at least 10 minutes twice this week with your FCP's voice in quiet.</p>	<p>"Especially early in your training, it is easier if you try and remember where 3 or 4 pictures are when they are presented on the screen instead of attempting to memorize all of them."</p> <p>"pEARl Crunch forces you to pay attention to those endings of words that add subtle meaning, such as the plural "s" or the negative "n't" These endings are often hard to hear and easy to ignore."</p> <p>"During every day listening, we tend to listen for the 'meat' of the word and not subtle nuances. For instance, we often do not distinguish between the words <i>smile</i> and <i>smiles</i>. This game forces you to pay attention to word endings. Think about it: There's a big difference between, "I <i>can</i> pick you up from the airport" and "I <i>can't</i> pick you up from the airport."</p>
Week 2	<p>Play ShakespEARe at least 10 minutes twice this week with your FCP's voice.</p> <p>Play MountainEAR about 10 minutes twice this week with a talker type that is the same sex as your FCP.</p>	<p>"Your FCP's voice may sound different to you because of your hearing loss, and will sound especially different if you have just received a new hearing aid or cochlear implant. By listening to your FCP speak sentences, you will likely begin to recognize the speech rhythms and cadences that the FCP employs when speaking, and this will help you recognize the FCP's words more quickly."</p> <p>"If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is</p>

		<p>programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“This game is important because it may help you to recognize words quickly, which is important when you are listening to connected speech. The typical talker of English speaks between 110 and 150 words per minute. This means that you must have good ‘auditory processing speed’ to understand speech, which is the brain’s ability to quickly process the meaning of words.”</p>
Week 3	Play pEARL Crunch at least 10 minutes twice this week with your FCP’s voice in light noise.	<p>“You can determine what is “light noise”. Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting four pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“Even though your FCP’s voice may be very familiar to you because you have listened to and talked with your FCP for a long time, you may not realize that you have not been attending to important word endings. When listening becomes difficult, the brain tends to pay less attention to word endings. Training with pEARL Crunch will exercise your auditory attention and lead you to pay more attention to word endings.”</p>

	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a talker type that is the same sex as your FCP.</p>	<p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“You may find that some of the pictures are a little ambiguous and that it takes some thought to match the word that you hear with the pictures that you see. This ambiguity is intentional. Research has shown that when listening tasks which force the brain to focus on meaning and it requires the brain to think of different possibilities, learning occurs more quickly.”</p> <p>“You are learning to recognize common words that occur frequently in everyday conversation. Over time, this kind of training will make listening easier for you.”</p>
Week 4	<p>Play ShakespEARe at least 10 minutes twice this week with your FCP’s voice.</p> <p>Play Treasure EARland at least 10 minutes twice this week with a talker type that is the same sex as your FCP’s voice.</p>	<p>“ShakespEARe may help develop your ability to remember the details of a story. It exercises your ‘auditory memory’, which is the brain’s ability to hold in memory words and sentences that you have recently heard.”</p> <p>“At first you may have a hard time remembering which sentence came first, second, third, fourth and fifth. Try to get at least three sentences in the correct order for each paragraph.”</p> <p>“One purpose of Treasure EARland is to increase your confidence in your abilities to</p>

		<p>recognize words. Research has shown that when you doubt your ability to hear words correctly, you actually don't hear them as well as when you have high confidence in your ability. The mind becomes distracted by the doubt."</p> <p>"If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers."</p> <p>"Don't get discouraged if you have to play more than 2 rounds to meet your goal."</p>
Week 5	<p>Play pEARL Crunch at least 10 minutes twice this week with your FCP's voice in high noise.</p> <p>Play EARonaut at least 10 minutes twice this week with a talker type that is the same sex as your FCP in light noise.</p>	<p>You can determine what is "high noise". Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three pearls for every necklace. Do not move the bar again but train at this noise level."</p> <p>"Remembering words is very important when you are listening to everyday conversations. When you hear a word, try to visualize which planet hides the corresponding picture."</p> <p>"You can determine what is 'light' noise. Start by setting the noise bar to its midway setting. If this makes it too difficult to hear the words, decrease the noise where you can hear the talkers, but you are still aware</p>

		<p>of noise. If in the midway setting, you can still easily hear the talkers, adjust the noise to be louder. During this process, you will not only exercise your ‘auditory attention’, or the brain’s ability to focus on a single speech stimulus, but you will also develop an awareness of the levels of noise that you can tolerate. This awareness will be helpful when you have to assess whether you will have to make accommodations for a particular setting, such as asking for a quiet section of a noisy restaurant.”</p>
Week 6	<p>Play pEARL Crunch at least 10 minutes twice this week with your FCP’s voice in high noise.</p> <p>Play ShakespEARE at least 10 minutes twice this week with your FCP’s voice.</p>	<p>“You can determine what is “high noise”. Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“ShakespEARE is designed to enhance your everyday conversations with your FCP by making listening easier and more successful. Very often in conversations, we “tell stories” about what happened during the day. In this game, you will practice paying attention to the beginnings, middles, and endings of stories, as told by your FCP.”</p>
Week 7	<p>Play MountainEAR at least 10 minutes twice this week with your FCP’s voice.</p>	<p>“You may find that you can recognize the words more quickly when they are spoken by your FCP than when they are spoken by a talker of the opposite sex. Try playing MountainEAR with your FCP’s voice. After several trials, then play MountainEAR with the voice of talkers of the same sex as your FCP. Do you find that you recognize words faster with your FCP’s voice? Does it seem</p>

	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with your FCP's voice.</p>	<p>easier to recognize the words when they are spoken by your FCP? Familiarity of the talker has a very positive effect upon your ability to recognize speech."</p> <p>"You are learning to recognize common words that occur frequently in everyday conversations with your FCP. Over time, this kind of training will make listening easier for you and participating in conversations much easier."</p> <p>"Try to ignore the noise and pay attention to which picture matches the word you've just heard. This activity will develop 'auditory attention', which is the brain's ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting."</p> <p>"Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick decisions about what you heard and sometimes this is hard to do."</p>
Week 8	<p>Play Treasure EARland at least 10 minutes twice this week with your FCP's voice.</p> <p>Play EARonaut at least 10 minutes twice this week with your FCP's voice in high noise.</p>	<p>"Even though this game is designed to develop your phoneme discrimination, which is your ability to decide whether two sounds are the same or different, it is also developing your ability to focus on the meaning of words and developing your sense of self-confidence in your listening abilities."</p> <p>"Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the</p>

		<p>maximum of noise that can be present during the game and yet allow you still to hear your FCP speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p>
Week 9	<p>Play MountainEAR at least 10 minutes twice this week with your FCP’s voice.</p> <p>Play FarmEAR in the Dell at least 10 minutes twice this week with your FCP’s voice.</p>	<p>“Many people with hearing loss feel that they only can understand what their FCP says if the FCP speaks very slowly. Training with MountainEAR will exercise your ability to understand your FCP when the FCP speaks with a normal speaking rate.”</p> <p>“Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick decisions about what you heard and sometimes this is hard to do.”</p>
Week 10	<p>Play Treasure EARland at least 10 minutes twice this week with your FCP’s voice.</p> <p>Play pEARl Crunch at least 10 minutes twice this week with all your FCP’s voice in high noise.</p>	<p>Learning to discriminate and recognize words in the presence of background noise will increase your confidence to engage in social situations, such as eating out at restaurants. Treasure EARland exercises your word discrimination abilities and your ability to hear your FCP in noisy settings.</p> <p>“You can determine what is ‘high’ noise. Start by setting the noise bar to its midway setting. If this makes it too difficult to hear the words, decrease the noise where you can hear the talkers, but you are still aware of noise. At first, you may find that what is a high noise level for you is very near the quiet position on the noise bar. With</p>

		continued practice, you might be able to tolerate more noise.”
Week 11	<p>Play ShakespEARE at least 10 minutes twice this week with your FCP’s voice.</p> <p>Your choice of game, at least 10 minutes twice this week, but play with the voice of your FCP.</p>	<p>“ShakespEARE is designed to enhance your everyday conversations with your FCP by making listening easier and more successful. Very often in conversations, we “tell stories” about what happened during the day. In this game, you will practice paying attention to the beginnings, middles, and endings of stories, as told by your FCP.”</p>
Week 12	<p>Your choice of game, at least 10 minutes twice this week, but play with the voice of your FCP.</p> <p>Your choice of game, at least 10 minutes twice this week, but play with the voice of your FCP.</p>	