#### Supplemental Material S2. Narrative samples.

The samples provided below are from two study participants (one with normal hearing and one with cochlear implants) who received similar scores on oral narratives, but different scores on written narratives. In line with the general trends for this study, the participant with normal hearing scored higher on the written narrative than on the oral narrative, and the participant with cochlear implants showed the opposite pattern. The rubric scores are provided in the table at the end of the supplement.

### Sample of an oral narrative from an adolescent with normal hearing for the "Hammie's Big Night" picture sequence.

Okay so once upon a time there was a little pig called Sir Pigs a Lot, and he's always dreamed of having or being more. He was always tired of watching the fishes swim and watching birds fly and stuff, and he was always sad how he was just stuck on the ground living on a farm. And so one day he asked his family if they could bring him to the top of the roof of their little shack that they live in because he claimed that he saw food up there. So he got up there and they all thought that he was just grabbing food, but little did they know that he wanted to get up there to call the birds over to carry him away. His family knew the dangers of the birds and stuff because if he was tooken away he'd probably never be seen again, and so they couldn't do anything though. So an owl picked him up and carried him away as his family watched in horror as they knew that they would never see him again. But as he was flying through the air he was happy and everything, screaming "I can fly now!" But little did he know what would happen to him in the future, He was never seen again.

# Sample of a written narrative from the same adolescent with normal hearing for the "Rescue at the Lake" picture sequence.

The Legend of the Moisty Merman. Once upon a time there were three kids. There was one boy and two girls. Their names were Eric, Linda, and Courtney. Eric was a very adventerous boy. Linda was kind and a bit of a show-off. Courtney was very sweet, but she was also very quiet. One day they all went to a pond. It was going how it usually goes, Eric and Linda talk while Courtney does her own thing. Even though Eric is an adventurer; he does not know how to swim because he is afraid of the water. When Eric was talking to Linda, they decided to play truth or dare. Eric went first, so Linda dared him to walk across the pond. Eric was unsure at first, but then Linda convinced him to do it because she kept calling him "chicken". Courtney thought it might go wrong, so she took off her shoes just in case she had to dive in. There has been rumors since the pond is connected to a swamp, there is a creature that lives in there. People say they have seen a manlike creature that lives underwater in that pond. The call him the Moisty Merman. Legend has it that if you disturb his pond, he will pull you under and drown you. Eric did not know about this, so he started to cross the pond. He was about halfway across when he felt something go past his leg. He stopped and begun to turn back when something grabbed him and started to pull him toward the deep end of the pond. Linda does not know how to swim either, so she started screaming for Courtney to save Eric since she knows how to swim. Courtney dived in after Eric because his head just went underwater. Then all of a sudden

Courtney got grabbed by something too. She started getting pulled under too, so then even though Linda didn't know how to swim she still jumped in after her, but guess what...she got pulled underwater too. To this day no one knows what happened to them, and their bodies have never been found. But there are some people that know only one thing could have happened, and that is, they disturbed the Moisty Merman. The end.

## Sample of an oral narrative from an adolescent with cochlear implants for the "Rescue at the Lake" picture sequence.

So on this nice sunny beautiful day, barely any clouds in the sky, there were three kids at a park. Two of the kids really liked to hang out around the river to watch the ducks swim around. They always bring some food, sometimes, to give to the ducks. Another girl just likes to hang out around the trees and just look around the trees. One day the boy decided he wanted to pet a duck. So he got into the river (or lake) and the other girl, who really liked the river as well, told him not to go into the water because they didn't know how deep it was. So what happened was he went into the water. The girl in the back was just watching him, didn't know what was going on because he was far away, couldn't hear anything. They thought they were just playing around. So the girl in the white shirt told her not to go. He went anyway. When she got closer to the ducks, they didn't like him that much because he was getting close. So they started quacking really loud at him, soon they got close enough to poke him with their beaks. So he fell into the water, but he fell into a deep end of the water. He didn't know how to swim. So he was splashing. The girl that was watching the back rushed over to the pond and was about to get into the pond to save the boy who fell in. When she got to the pond she was about to jump, but then she remembered she couldn't swim either. So the boy went down the river until finally a nice man pulled him out of the river, took him back to the bridge, then he met up with his friends again, and then they went home.

### Sample of a written narrative from the same adolescent with cochlear implants for the "John's Birds" picture sequence.

It was a nice sunny day, so a boy and his mother and friend went on a picnic. The boy saw two bird having a hard time finding food, so he gave them some seeds from his apple. Soon the wind started to pick harder. The leafs started to blow of the tree. The mother hurried to pack up and told the boy to get inside, but he stayed and ran to the tree and saw eggs in the birds nest. The rain has started and you can hear the loud booms of the thunder Boom. The Boy took the nest off and ran to the house, but he was blocked by a tree branch that flew off of the tree. And the was a tornado coming at the house. The boy panicked and ran up his tree house and stayed low on the floor scared. The tornado lift the tree higher and higher. "Boom" the tree house was gone and the boy woke up in a town of small people saying "Welcome to OZ." The end.

#### **Narrative Scores**

Rubric Category	NH-Oral	NH-Written	CI-Oral	CI-Written
Introduction/Setting	1	2	2.5	1
Plot	1.5	3	3	1
Character Descriptions/ Development	2	3	2	1
Mental States	2	2.5	2	2
Referencing	2	3	0	2
Focus	2	2	2	1
Order	2	2	1.5	2
Details	2	3	2.5	2
Narrative Tense	2	2.5	2	1
Vocabulary	2	2.5	2	1
Ending	2	2	2	1
Cohesion	2	2.5	2	2
Total	22.5	30	23.5	17

*Note.* NH = normal hearing; CI = cochlear implants.