

Listen, Hear!

by Geoff Plant

KidTrax

Introduction

Last year, I devoted two issues of "Listen, Hear!" to Speech Tracking, and wrote in detail about its usefulness as a training and testing approach. I'm returning to the topic in this issue to introduce "KidTrax," a new testing and training resource for children with cochlear implants. In 2002, Sue Archbold, who was then working at the Nottingham Children's Cochlear Implant Program in the UK, contacted me to see if I would be interested in working on developing a Speech Tracking resource aimed at children aged 5 - 16 years. Sue and her group in Nottingham had been developing a series of graded materials for use in evaluating the children in their program, and she felt it would be a good idea to get these out to a much wider international audience. I readily accepted the offer and, a few months later, we started work on the project. The first version of "KidTrax" was published by the Nottingham-based EAR Foundation in 2003, and clinicians and teachers throughout the United Kingdom are now using it. In this issue, I will describe the new version of "KidTrax" we have developed for worldwide distribution through MED-EL.

Kid Trax

Our aim in writing "KidTrax" was to provide teachers and clinicians with a range of written materials to use to evaluate and train the speech reception skills of children fitted with cochlear implants. We were aware that the speech reception skills of any group of children vary widely, so we needed to have materials that ranged from very simple through to quite complex. We decided to present the materials at three levels, with two versions of each story within the first two levels.

Introducing Speech Tracking

The first thing we needed to include in the program was an introduction to Speech Tracking. We provided an overview of the approach (see "Listen, Hear!" 1/2004 and 2/2004 for background information on Speech Tracking), and noted the criticisms made of the approach by Tye-Murray and Tyler¹. These included the need for both parties (the sender and the receiver) in Speech Tracking to be familiar with the approach, prior to attempting to use it for evaluative purposes.

In order to do this, we included a simple set of pictures that could be used to introduce the approach to children. A deaf Australian artist, Elisabeth McIntyre, drew the pictures used; they tell a simple story about an Aboriginal boy living in Australia. The pictures help to provide contextual cues to assist the child to understand her/his task - to repeat back every word presented. At first, we suggest that the child point to the picture that relates to what s/he hears, but, over time, the clinician/teacher should encourage the child to attempt to repeat each line after it has been presented. This introductory exercise should also assist the clinician/teacher to determine which level should be used, and the mode of presentation - auditory only or auditory-visual. Once the clinician/teacher feels that the child is familiar with the approach, the materials provided can be used for testing.

¹Tye-Murray, N. & Tyler, R. 1988. "A critique of continuous discourse tracking as a test procedure." *Journal of Speech & Hearing Disorders*, 53, 226 - 231

Level One

The stories used at this level in both editions of "KidTrax" are from the Oxford Reading Trees Series, and involve the adventures of a young boy, Kipper, and his family. We selected five stories from this series to use in the program. Each Tracking text is based on a book from the series and presents a simple story through a set of bright, attractive pictures. We wanted materials that were "child-friendly," and we feel that this series achieves that aim. We decided to present two versions of each story, one easy (Version 1) and one slightly more difficult (Version 2), as we wanted to provide for as wide an ability range as possible. Here's an example of the two levels of difficulty from one of the stories used, "The Haircut":

Version 1

Picture 1

1 Daddy combed Kipper's hair.

Picture 2

1 "Ow!" said Kipper. "Stop it!"

2 Daddy said, "It's too long."

3 Kipper's hair was too long.

4 Daddy's hair was too long.

Version 2

1 Daddy combed Kipper's hair with a big red comb.

2 Kipper was not happy.

3 Daddy was not happy

1 "Ow!" said Kipper.

2 "Stop it Daddy! That hurts!"

3 "Your hair is too long," said Daddy.

4 "You need a haircut."

5 "Your hair is too long Daddy," said Kipper.

6 You need a haircut too."

The stories can be presented with or without the pictorial cues, and we suggest that, wherever possible, the duration of each Tracking "session" should be five minutes. However, we recognize that in dealing with younger children the clinician/teacher needs to be flexible, and a shorter time span may be necessary with some students.

Level Two

In the original version of "KidTrax," the stories used were adapted from Roger Hargreaves' popular "Mr. Men" series. Unfortunately, copyright restrictions made it impossible to use these stories internationally, so I decided to write a series of simple stories to use at this level. Again, there are two versions of five stories provided in the program. The stories center on a class of children and their teacher, Miss Smith, and are told in the first person by one of the children. A book containing around twelve pictures is provided for each of the stories. Again, this can be used to provide contextual cues if the clinician/teacher feels that they are needed. I would have loved these illustrations to have been done by Elisabeth McIntyre, but, unfortunately, she passed away in late 2004. I was in contact with Elisabeth's daughter, Jane Eldershaw, following Elisabeth's death, and when she heard about the stories, she volunteered to provide the drawings needed. Jane, like her mother, is a very talented artist, and her simple, but very effective, pictures help enhance the overall appearance of the stories. There's also something very fitting about having Jane provide the pictures, and I feel that it gives an air of continuity to the project.



The picture to the left shows the five main characters in the story. Miss Smith is standing behind the four children (left to right) John, the narrator, Michael, and Sammy. I wanted the stories to be told in the first person, as this mirrors the reality of everyday communication. When we are talking with people, we tell them about what we have been doing, our opinions, etc., and, as a result, words such as "I," and verbs in the first person predominate. Having the stories told by a narrator allowed me to use this more "natural" language form.

In the example below, the children are visiting a museum and Michael finds it very hard to control his urge to touch the exhibits. Here are the two versions:



Version 1

- 1 We went into the museum.
- 2 We went into a big room full of dinosaurs.
- 3 Some of them were very, very big.
- 4 "Wow!" shouted Michael.
- 5 "Look at them!"
- 6 "Michael!" said Miss Smith.
- 7 "Sorry," he said quietly. "I forgot."

Version 2

- | | |
|--|--|
| 1 We walked into the museum, | 2 and up the big stairs to the dinosaur show. |
| 3 It was in a special room full of dinosaur bones, | 4 dinosaur skeletons, and model dinosaurs. |
| 5 Some of them were very, very big, | 6 and when Michael saw them he was very excited. |
| 7 "Wow!" he shouted. | 8 "Look at them!" |
| 9 "This is so cool! Wow!" | 10 "Michael!" said Miss Smith. |
| 11 "What was the first rule?" | 12 "Sorry," he said quietly. "I forgot." |

Level Three

This is the highest level in the program, and is aimed at older children and young adults. That age group should be able to cope with five-minute Tracking sessions, and I wanted to make sure that the story was long enough to allow for repeated testing over an extended period. The resulting story, "Run Away" is set in Sweden in the mid-nineteenth century. This story is also told in the first person, and the narrator, Nils Johansson, has run away from home. Nils' father comes after him, and seems intent upon catching him, at all cost. Several people, a farmer, a priest, and a robber come to Nils' aid, but his father and two henchmen are getting closer all the time.

There is only one version of this story, as I hope that it will prove to be suitable for a wide range of older children. In the following example, Nils has a "close call" soon after running away from home.

- | | |
|---|---------------------------------------|
| 1 I could hear the sound of a horse's hooves on the road, | 2 and crept out on my hands and knees |
| 3 to see who was coming. | 4 There on the road, |
| 5 only a few hundred yards away, | 6 I could see a white horse, |
| 7 and, although I couldn't see the rider's face, | 8 I knew who it was. |
| 9 My father was the only person in the district | 10 with a white horse. |

Using "KidTrax"

The program provides clinicians/teachers with a detailed description of Speech Tracking, and offers suggestions for using it as a formal test procedure. These are summarized below:

- Use materials that are at an appropriate level for the individual child; they should be neither too easy, nor too difficult.
- Both the receiver and the talker should feel comfortable with the procedure - it may help to practice before testing.
- If possible, the test session should occupy a total of five minutes. If time-outs are needed, stop the clock, and resolve the problem before proceeding.
- No matter how tempting it is to use mime, or reword a particular problem word or set of words, it is important to remember that repeats are the only acceptable repair strategy. If needed, take a time-out and use these other techniques to resolve the problem, but don't use them during the timed period.
- Encourage the child to respond even if s/he only picks up a word or two. Make sure that the child understands that responding lets the talker know how to best proceed - it helps make the task easier for both parties.
- Never use the same text more than once for testing. This means that the stories in Levels 1 and 2 can only be used once. The Level 3 story contains more than 8,000 words, so a new part of the story can be used for testing over time.
- Encourage the child to see Speech Tracking as a challenge, but not an intimidating one. Many adults report that they see changes in their Tracking rates in the same way as they see changes in their golf handicaps! The only difference is that they want the Tracking Rate to rise, not fall!

Availability

"KidTrax" is the newest addition to MED-EL's set of (re)habilitation resources for testing and training, and is part of the company's ongoing commitment to provide materials that can be used by clinicians/teachers working with children and adults. If you would like to buy a copy of "KidTrax," please contact your local MED-EL representative.

Conclusion

Speech Tracking is an important technique that has applications in the testing and training of children and adults with cochlear implants. "KidTrax" provides clinicians/teachers with a wide range of text materials suitable for use with children from the age of around five years. It is our hope that this resource will become widely used, and will lead to a uniform approach to Speech Tracking.

Next issue

In the next issue of "Listen, Hear!" I'll introduce "TesTrax," another testing resource aimed at assessing the speech reception skills of teenagers and young adults. "TesTrax" was launched at the International Congress of Educators of the Deaf in Maastricht in The Netherlands in July 2005. It uses a modified form of Speech Tracking, and can be used in conjunction with the Level 3 materials of "KidTrax."

Contact

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