App for kids with autism to learn conversation skills

Talk With Me is a collaborative learning tool for promoting social interaction in the lives of children with autism. Developed in New Zealand, the app is customisable and comes with a wide variety of conversations to choose from, writes Swati Gupta.

Launched last month, Talk With Me is a resource for educators and parents to help children with autism learn social interaction skills. It is a symbol-based collaborative learning tool where children sit alongside people in their lives and have conversations on a variety of topics, which can be personalised according to their needs.

The idea was conceived five years back when I attended a classroom session at Christchurch-based Hillmorton High School’s special needs Upland Unit. At the time, I was working as a Principal Research Scientist at Callaghan Innovation’s Assistive Devices team.

We were experimenting with computer games to aid social interaction among children with autism. One day, the idea of enabling conversation through symbols started to emerge and after years of R&D became what we call the Talk With Me app today.

“Building something that people actually need and would enjoy using, is no small feat,” said Alok Agrawal, Product and Operations Lead. “Even for seemingly insignificant app features, immense amount of thinking, R&D, trials and iterations have gone into creating Talk With Me.”

Motivating results

The technical development process has included several trials through various collaborations, which produced very motivating results. We recorded over 20 minutes of continuous and independent conversation, minimal therapist intervention, excellent joint attention and cooperation, attempts to verbalise, expressions of joy, understanding of turn taking, minimal training and good memory retention of the tool’s use.

Teachers and therapists commented that these are outstanding results for children with very limited social interaction and attention spans of up to three minutes at best. They usually require high intervention and persuasion, rarely work together independently and if left alone, wouldn’t communicate at all.

Anecdotal evidence shows that after regularly using the app, children started interacting socially in a way they never did before; started greeting others at school, expressed their wish to go out and play, and developed friendships.

Transferable skills

Most importantly, we found that skills learned while using the app were transferred to everyday life.

First was a feasibility study by Callaghan Innovation, University of Otago and the Upland Unit in 2016, which showed that children’s social interaction and engagement was superior with Talk With Me, as compared to their personal AAC device and physical symbol-based vocabulary cards.

Then a student project of Worcester Polytechnic Institute US and Callaghan Innovation, conducted interviews with autism community members and found that there exists a need for a tablet-based app for developing communication skills, that is customisable, collaborative and culturally appropriate.

In 2017, Callaghan Innovation and University of Otago teamed up with Autism NZ, to investigate the app’s benefits as perceived by parents at home. They reported children gaining confidence, increased school participation and improved turn-taking.

The app also found support from notable organisations like Kiwinet and Norman Barry Foundation, which helped in conducting multiple informal intervention trials in New Zealand and India and in preparing a business case for Talk With Me, which eventually led to the formation of Inclusys.

Built with love

“There’s no limit to the things one could possibly talk about. Constantly crafting new conversations, while keeping them relevant, interesting, logical and smooth, is a challenging yet enjoyable process,” added Amy Taylor, Speech and Language Therapist.

Every child is different and autism is not an easy journey, for the families who are affected, their teachers, therapists and caregivers. We can’t promise that the app will work for every child but we encourage people to give it a try – and let us know what they think. We’ve built Talk With Me with love and are committed to continue improving it. >>

Dr Swati Gupta is founder of Inclusys, the tech company behind Talk With Me, which is available for iOS and Android. For more go to talkwithmeapp.com