Children With Dyslexia Overcoming Hurdles Thanks To Dytective

Carnegie Mellon University

Dyslexia is a neurodevelopmental disorder that affects a person's ability to read, write and spell; however, signs of dyslexia in children often go unnoticed by educators, parents or casual observers. As a result, dyslexia remains a formidable hurdle for millions of children worldwide.

In 2016, Luz Rello, an accomplished linguist and computer scientist, founded the social enterprise Change Dyslexia to address the importance of detecting dyslexia early to offer adequate reinforcement and treatment. By bringing dyslexia to the forefront, dyslexia is no longer a hidden disorder and those affected can have appropriate intervention and achieve desired learning outcomes.

Change Dyslexia utilizes Artificial Intelligence for its flagship educational tool Dytective. Dytective is a cognitive training program with more than 42,000 scientifically validated exercises for training. These training exercises are presented as a video game–a format catered for children to enjoy. The training adjusts the level and type of exercises for each child, offering personalized training of 24 cognitive skills overarching five categories: linguistic competence, executive functions, working memory, visual perceptual processes and auditory perceptual processes.

Rello developed and licensed her technology at Carnegie Mellon University. Carnegie Mellon's technology transfer office assisted in strategies involving proprietary or open-source business models. By 2017, Dytective was introduced in

schools, involving 40 schools in Madrid, Spain. Since then, Dytective has been launched in 200 schools and 1,200 educational centers in Madrid.

Change Dyslexia also addresses socioeconomic inequalities among children with dyslexia by eliminating access barriers. Dytective's easy accessibility allows students to overcome learning difficulties related to dyslexia regardless of socioeconomic status. Dytective's free dyslexia screening has already been used by more than 300,000 people worldwide. With Change Dyslexia, children can overcome their learning difficulties related to dyslexia by identifying the underlying cause of their academic struggles early.

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