

NESTI: An Al-Supported App for Assessing Abilities of Children by Pre- and Primary School Teachers Worldwide

Introduction

NestingPlay is a social enterprise from Hungary with the mission to improve the learning outcomes and social inclusion of children with atypical development. We believe in the importance of early childhood education (ECE), and the power of play (Learning through Play) to improve children's social, emotional, creative, and cognitive skill development. Our methodology also builds on the traditions of the Hungarian special education (A. Peto and A. Deveny), and the sensory-based development (M. Montessori and J. Ayres) methods.

Our beneficiaries are children of ages 3-8, especially children with developmental delays, learning difficulties and adverse behaviors, caused by organic disabilities, neurological disorders, injuries, severe illness, or elevated and prolonged stress. This is the group of children who often get overlooked due to their usually 'invisible' handicap which is demonstrated through extreme behaviors, isolation, or inadequate social responses. One in six children is included in this category and this number is steadily growing.

We act as an incubator of innovative educational approaches, designing and piloting innovative educational practices that help provide the atypically developing children with quality inclusive educational services. We design projects tailor-made to the needs of a given children group and community; we complement ongoing large educational projects with this focus on the atypically developing children; we provide policy advice on inclusive education; and we implement projects, with tailor-made capacity building activities provided for parents, education, and health professionals, etc. Our thematic focus falls under SDG#4 ensuring inclusive and equitable quality education for all and SDG#3 ensuring healthy lives and promoting well-being for all at all ages.

Problem Statement

In every class, there is 6-7 children with atypical development, in disadvantaged communities even more. Teachers generally lack the necessary knowledge and tools to address developmental alterations in the classrooms, causing that children with atypical development, including from disadvantaged communities, in large numbers end up in segregated learning environments or drop out of school. Disadvantaged children, like the Roma, attend early childhood education (ECE) at a much lower rate and start school at a significantly lower ability level than their peers from non-disadvantaged communities. Quality ECE secures success throughout education, including reduced dropouts, increased learning outcomes, better social inclusion and higher education goals met.

Our customers and beneficiaries are teachers in early and primary education (for children of 3-8 years) with a special focus on disadvantaged communities where access to quality early childhood education is an issue. Given the pandemic, it became clear that we would need an online solution to continue carrying out our running projects. We have also received an increased number of inquiries to pilot our activities in further countries in Central and Eastern Europe with disadvantaged and difficult-to-reach communities who are lacking access to quality early childhood education. That is why, we have started developing NESTI.

NESTI

NESTI is an Al-supported application on early childhood education to improve teachers' competencies to provide higher quality and inclusive education, especially in developing countries and disadvantaged communities. Most children with developmental delays are not identified early enough to benefit from early interventions. The low-cost open-ended app is a simple tool for teachers (i) to assess development alterations of children (ages 3-8) in 5 key areas compared against several age-specific milestones; and (ii) to receive recommendations (tips and tricks, and sample play activities) for in-class use to more efficiently plan their curriculum-based class activities, taking into consideration the individual skill sets and learning abilities of their respective students. Ultimately, we aim at building a collaborative Al-supported platform where ECE experts and practitioners can communicate and find solutions to real problems in early childhood education. NESTI will be available in English and Spanish languages.



Today, on the market, there are mostly offline solutions available for teachers, generally special education teachers, to assess children's abilities based on academic progress, and build their competencies. Our Alsupported app, NESTI makes our assessment tool and special knowledge available for any teacher, anywhere in the world, in a fast, simple, and low-cost manner. It promotes real classroom inclusion through curriculum-based group activities.

Through our AI-supported knowledge platform and NESTI, we aim to reach as many teachers globally, especially in disadvantaged social groups, enabling them to provide higher quality ECE. Eventually, we aim to contribute to systemic changes in the education sector, especially as regards, early children assessment, curriculum development for teachers' training, capacity and competency development of teachers, inclusive classroom management, and children-centered systems and curriculum.

Value proposition

- There is no similar online app on the market currently.
- It makes our assessment tool and special knowledge available for any teacher, anywhere in the world, in a fast, simple, and low-cost manner.
- It allows direct communication between teacher and parent on NESTI.
- The platform will provide opportunity for collaborating and exchanging knowledge among early childhood practitioners worldwide.
- The AI will enable the platform to learn and evolve based on rated opinions/recommendations.
- The platform will become a one-stop-shop on early education and an important means for policy change in the education sector.

Team

Our core team is led by an award-winner social entrepreneur, a true visionary. The core team also includes an early childhood education specialist with 30+ years of experience in different countries (Hungary, Austria, Germany, Tunisia, Israel), an inclusive education specialist with 20+ years of experience with international development agencies and NGOs (WB, UN, CoE, Roma Education Fund, Pressley Ridge Foundation, Milestone Institute, OSF), and an IT technical expert with a passion for inclusive education. Overall, we have sound domain expertise in ECE, extensive experience and network built in the Central and Eastern European region especially with disadvantaged communities, and a high-passion visionary CEO with a creative and innovative mindset. We have 5 fulltime and 6 parttime employees.

Partners

We believe in working in partnerships and for such, we welcome interested agencies, schools or companies that would be interested in supporting the development of the app and the AI-supported platform, test NESTI and support our global sales efforts.

For more information, please contact:

Eszter Harsanyi, Founder, NestingPlay Email: eszter.harsanyi@nestingplay.com

Tel: +36304354347 www.nestingplav.com