



„???cognitive supportive technology???“

The aim of the project is to develop tools (for individuals or for environment) to improve cognitive and relational abilities of children and adults that are affected by **behavioral problems, like autism or depression**. Autism is an increasingly spreading pathology (1 child out of 150). Up to now, there is no cure. The Applied Behavior Analysis (ABA) is so far the only recognized technique that has improving effects on problematic individuals (global healthcare guidelines, 2012), stopping or slowing the neurobiological and psychological pathologic process. The challenge is to find a solution that helps ABA therapeutic process, developing for instance general abilities (reading, thinking through time and space, empathy ...) or activities that can help to develop autonomy for the individual (e.g. dressing, feeding, follow an every day routine, doing a job, ...). In addition to technical developments, the project aims at supporting directly involved actors (families, healthcare providers, ...) with knowledge information systems, and knowledge sharing tools for the everyday activities.

Intent Scope

The focus is across product and platforms to address the needs of individuals that are affected by behavior disturbs (like autism) as well as of actors interacting with them (family, tutors, ...). The main interest is to empower the ABA therapeutic process that children and adults follow. The vision is a solution that follows the individual needs throughout her cognitive and relational improvement process.

Exploration Questions

- *Which tools can we develop to sustain a self-improving program that let problematic adults develop autonomy and improve life quality? (e.g. dressing, feed yourself, follow a daily routine, ..)
- *Which kind of tools can develop autistic children's general cognitive abilities such as reading and counting, social interaction and empathy?
- *Which tool and knowledge management systems would support cooperation between actors (families, tutors, teachers, employers, residential structures..)?

Target Users

- *Individuals affected by autism or other problematic behaviors (dyslexia, depression, ...)
- *Healthcare supportive network: ABA Tutors and Consultant, doctors, specialized centers and residential structures' directors, healthcare policy designers.
- *Social integration: Families and actors daily interacting with the individual (teacher, employer, neighborhood, ..)

Expected Outcome

Final Design of a solution

Success Metrics

Interest of target users; willingness to develop the final product

Research Plan

According to the overall Design Thinking Planning.

How will you explore your opportunity space? You will need a plan, including a timetable and milestone, for both primary and secondary research.

Project Planning

European Institute of human behavior Studies (www.iescum.org) offered psychological and medical expertise to support the idea generation and design activities.

IESCUM also offered a valuable network of organizations and professionals to test and help improve the prototypes.