INTERACTIVE DIGITAL BOOK FOR DEAF AND LISTENER CHILDREN

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INTRODUCTION
Develop a digital book for deaf children based on a bilingual perspective

The research is supported by the National Council of Scientific and Technological Development (CNPq), an agency of Brazil’s Ministry of Science, Technology and Innovation (MCTI).
Its main attributions are to promote scientific and technological research and stimulate researcher training in the country. The research is being carried out within the ambit of the Interdisciplinary Design Lab / Department of Education for Arts & Design at Pontifical University Catholic of Rio de Janeiro (LIDE|DAD|PUC-Rio).

From 2004 to 2007, the LIDE team developed a research project called ‘Multi-Paths: a game to assist in acquiring a second language by deaf children’. The public for this project was deaf children enrolled in elementary school at the National Institute of Deaf Education of Rio de Janeiro - INES/RJ. With the objective of moving forward with the Multi-Path project, which resulted in a game with two versions, one a board game, and the other in multimedia, the intention is to create a digital children’s book with interactivity possibilities, comprised of scenes narrated in LIBRAS and written Portuguese.

The intention is to take Multi-Path to a new platform, since the content to be created will be provided in tablets, and/or similar support, aimed at innovating the teaching-learning process for deaf children.
Based on the skills and competences determined by the Laws for Guidelines and Bases for Children’s and Elementary Education (Law no. 9.394/96 – Law for Guidelines and Bases for National Education, BRASIL, 1996), the stories in their hard copy or digital formats stimulate vocabulary and provide countless gains in skills for children, including deaf children.

In this sense, the study includes discussions on issues related to Design and to contemporary languages in education. For such, hypermedia concepts in educational environments will be examined, giving priority to interaction, user experience and the role of teaching-learning for deaf children.
REFERENCES
Building a future in which people live in harmony with nature.

TOGETHER

START
So his life among the books began.

With his deeply inscribed the most mysterious and inviting room he had ever seen. It was filled with the flickering of countless pages, and Morris thought he could hear the faint chatter of a thousand different stories, as if each book was whispering an invitation to adventure.

The books were very quiet for awhile. Then they noticed that Morris Lessmore had felt something behind. "Oh his books," said his oldest friend, "Books were Morris' enemy. All of his joy and sorrows, all that he knew and everything that he hoped."
The Kanban methodology is related to the use of cards (post-it and others) to indicate the progress of project development flows. Currently, the Kanban can promote better transparency of project progress in development, thus contributing to greater motivation and commitment of the team, favoring the continuous inspection and providing easier changes during the development of the project. In the following is presented the research process.
METHODOLOGICAL PROCESS

**Similar research**
- Interactive stories
- Pedagogical Digital activities for deaf children

**Development of the script and character**
- How to build a bilingual narrative?
- How to use bilingualism?

**Visual resources**
- Why visual language is so important to deaf children?
- How to use graphic resources in an interactive story?

**Interaction**
- Interaction used as a resource for learning bilingualism
- Touch generation
- Available interactive resources

**Object category**
- References
  - multi-talhas.com/
  - The Fantastic Flying Books
  - Pro Deaf
  - WWF Together

**Script/interactive story**
- Authors
  - W. J. Eimer
  - Christopher Vogler
  - Guto Lins

**Visual language**
- Authors
  - Rita M. de S. Couto
  - E. Fernandes
  - Cristina Portugal
  - Carlos Sigler
  - Ana Teresa Correia
  - Silvane Cristinho
  - Maria R. C. Luchesi

**Interactive resources**
- Authors
  - Shedoff
  - Bill Burton

STORYBOARD
- Crew: LIDE, illustrator, motion graphics and translator
  - (Scenes e scenes illustration, scenarios e characters)

Method validation (GADI)

DEVELOPMENT
- Crew: LIDE, illustrator, motion graphics, translator and web developer
  - (Software development, motion graphics, interactive resources, usability and accessibility – prototype)

Method validation (Heuristic Evaluation + Assessment Instrument Focused Planning)

VALIDATION
- Crew: LIDE + Instituição de ensino de surdos
  - (Prototype analysis with deaf children)

Method validation (Direct observation)

EVALUATION
- Crew: LIDE
  - (Conclusion)


THANK YOU

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