



aBoard: a Cloud Computing Platform for Alternative Communication and Inclusive Education

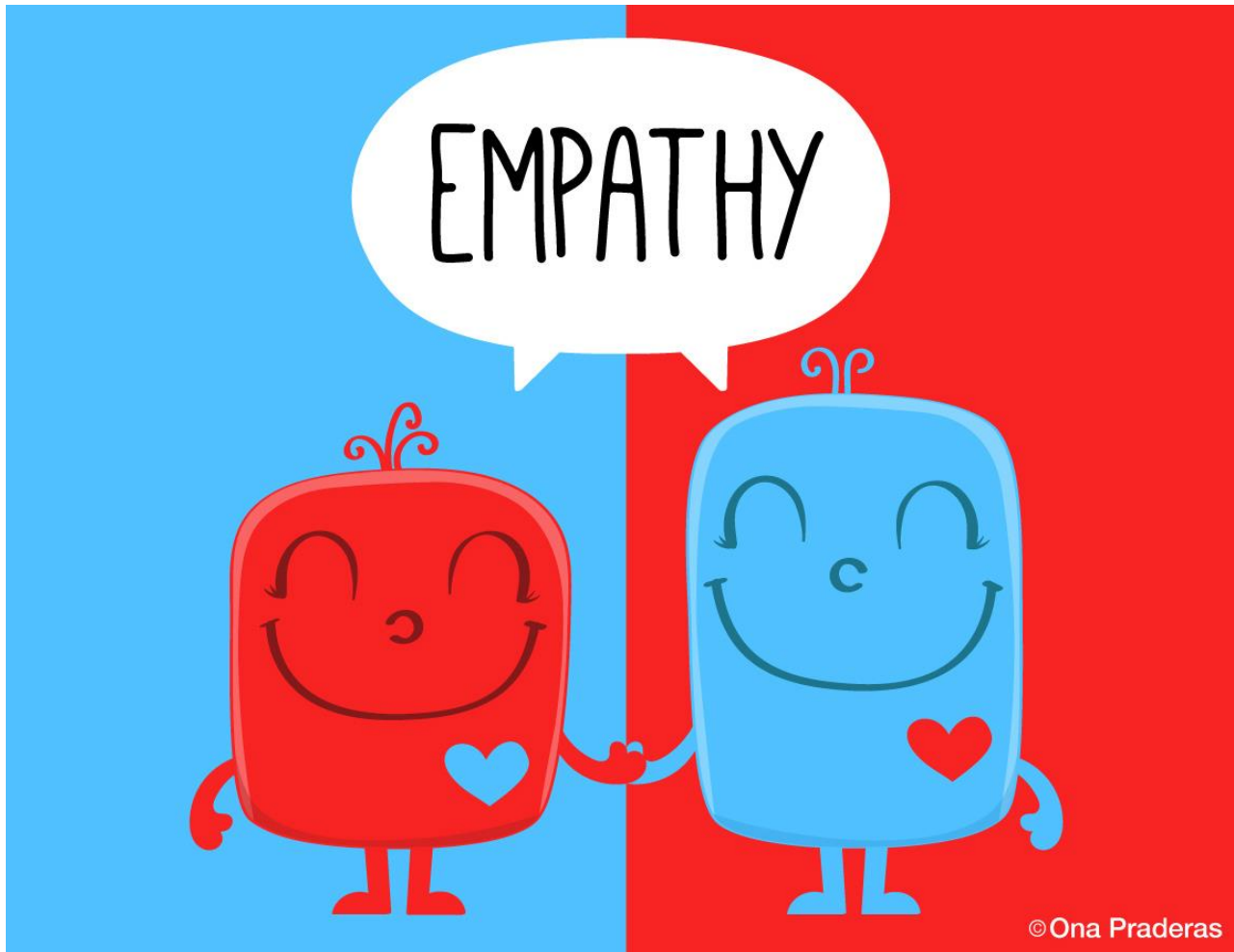
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Let's do an empathy exercise?



How long can you stay without expressing your desires, opinions and feelings?



**What would happen if
nobody understood you?**



What would occur if you did not understand the world around you?



Our Potential Public

Individuals who have communication disorders:

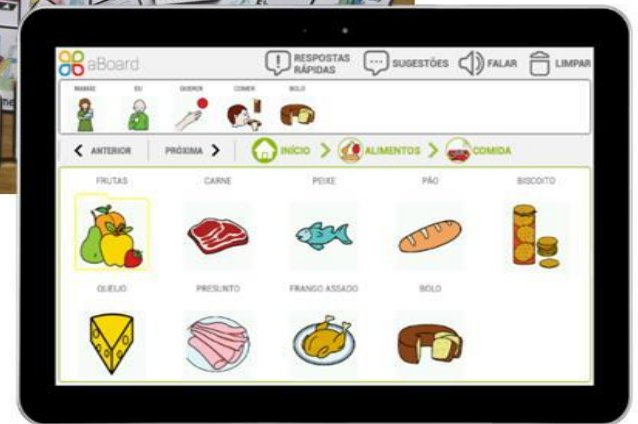
- Cerebral Palsy
- Autism spectrum disorder
- Down Syndrome
- Stroke
- etc.



Beukelman and Mirenda (2013) estimated that approximately 1.3% of USA population (+/- 4 million) need alternative communication

What is Alternative Communication?

1 IMAGE
WORTH MORE THAN
1000
WORDS



It is the use of other communication modalities to support or replace verbal communication

What are the main benefits of Alternative Communication?

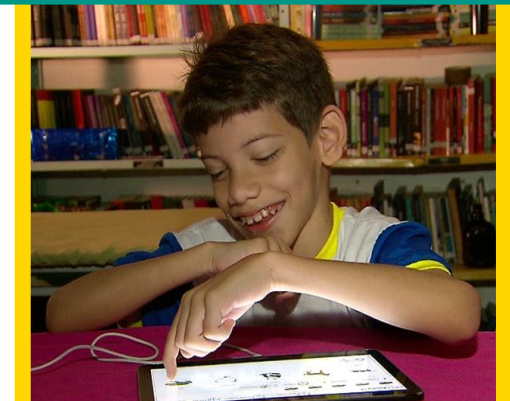
Alternative Communication helps to:

stimulate interactions with other people

improve the understanding, perception, attention, memory, conceptualization, language and inclusive literacy

increase the self-esteem and the quality of life of the individual and his / her relatives

reduce the frustration



Platform Overview

Mediators, family and education/health professionals



aBoard Editor



aBoard



People who have communication disorders



User authentication and vocabulary storage

Vocabulary personalization

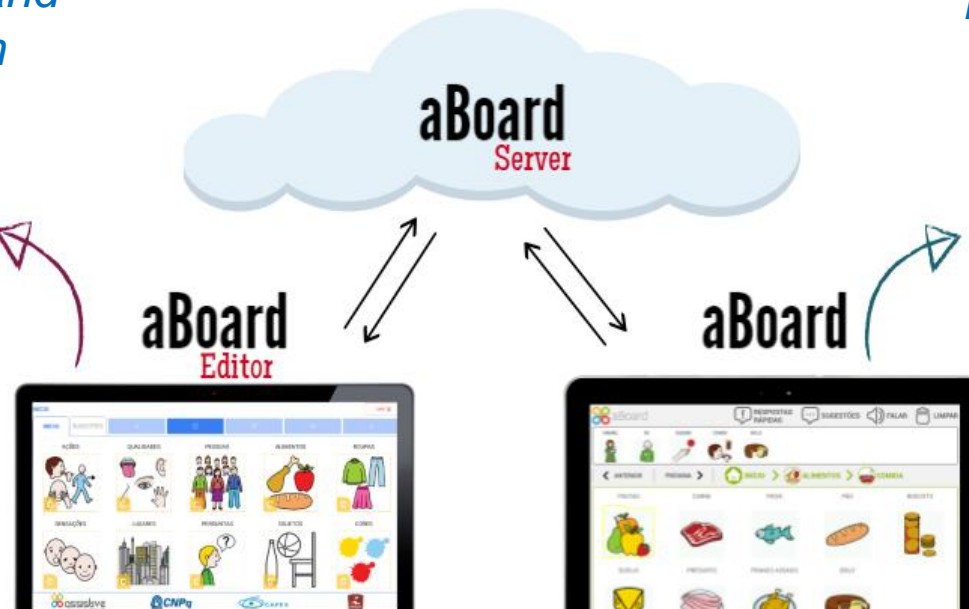
Sentence construction

Our advantages

Mediators, family and education/health professionals



People who have communication disorders



Cloud: The vocabulary can be personalized and used by any PC or tablet anywhere in the world and it is always backed up

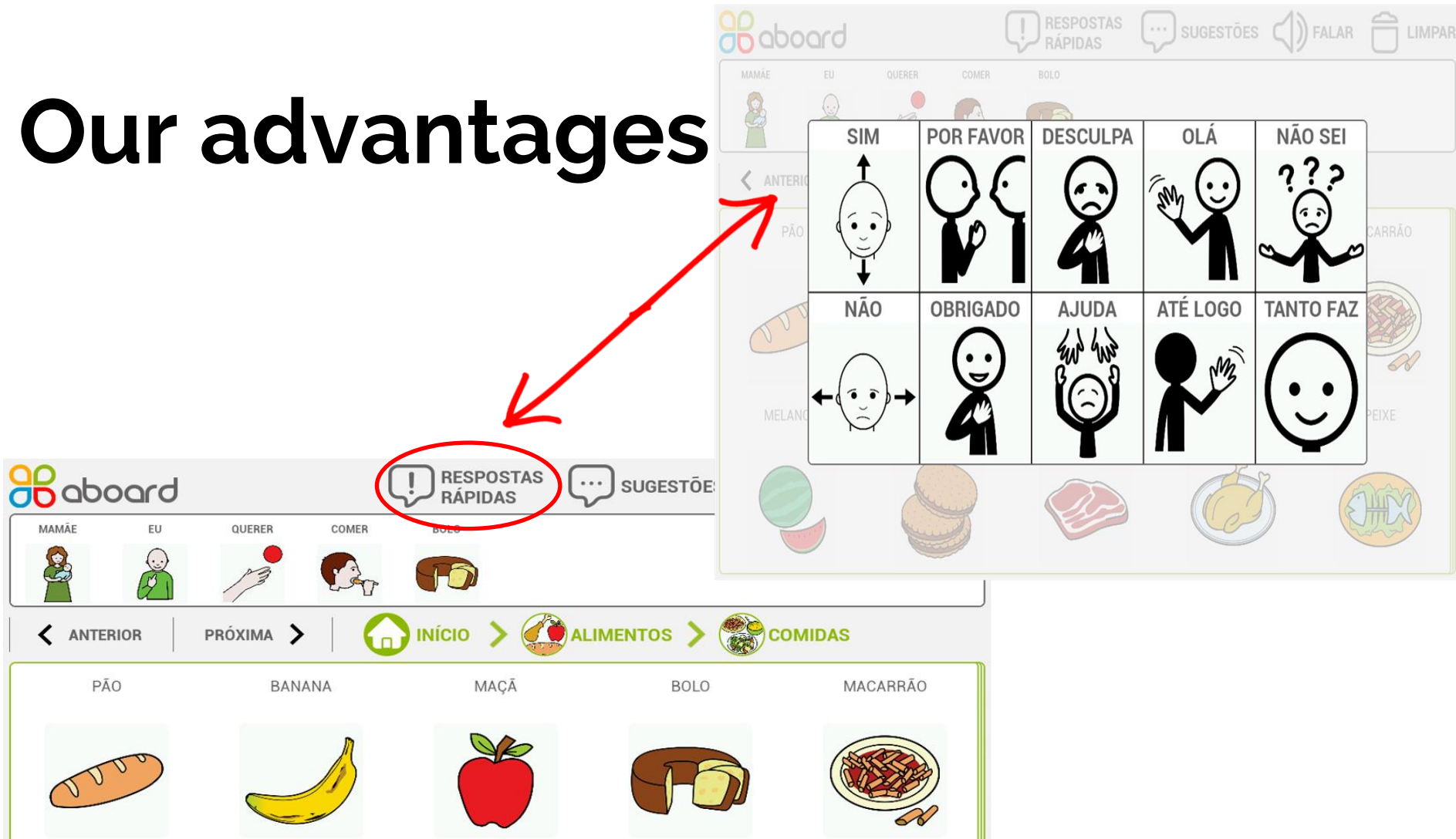
Our advantages



Pictogram suggestion:

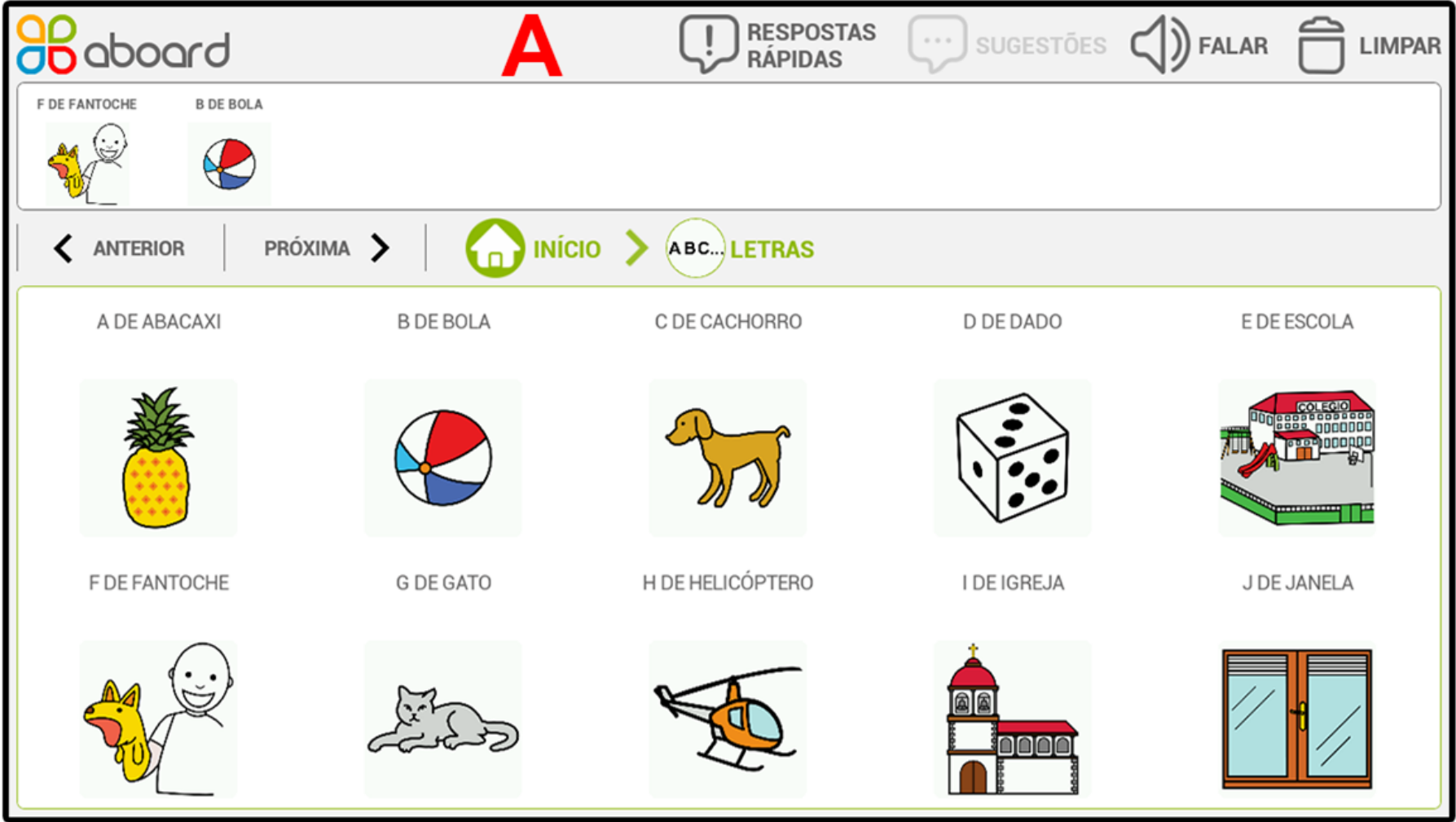
it accelerates the pictogram search and helps to write more meaningful sentences

Our advantages



Quick answers: It allows parallel communication

Adaptations for inclusive education



Teaching letters, syllables or words

Adaptations for inclusive education

The screenshot shows the 'aboard' app interface. At the top left is the 'aboard' logo. In the center, a large red letter 'B' is displayed. To the right are icons for 'RESPOSTAS RÁPIDAS' (a speech bubble with an exclamation mark), 'SUGESTÕES' (a speech bubble with three dots), 'FALAR' (a speaker icon), and 'LIMPAR' (a trash can icon). Below this is a math problem: 'DOIS' above the number '2', 'MAIS' above '+', 'TRÊS' above '3', 'IGUAL' above '=', and 'CINCO' above '5'. A navigation bar below the problem contains: '< ANTERIOR', 'PRÓXIMA >', a home icon labeled 'INÍCIO', a math icon labeled 'MATEMÁTICA', and a circled '1 2 3' labeled 'NÚMEROS'. The main area features a grid of numbers 1 through 9. Each number is in a large font with its Portuguese name above it: 'UM' (1), 'DOIS' (2), 'TRÊS' (3), 'QUATRO' (4), 'CINCO' (5), 'SEIS' (6), 'SETE' (7), 'OITO' (8), and 'NOVE' (9).

Teaching numbers and math operations

Adaptations for inclusive education

The screenshot shows the 'aboard' software interface. At the top, there is a logo 'aboard' with a red letter 'C' next to it. To the right are icons for 'RESPOSTAS RÁPIDAS' (a speech bubble with an exclamation mark), 'SUGESTÕES' (three dots), 'FALAR' (a speaker icon), and 'LIMPAR' (a trash can icon). Below this is a menu bar with nine items: 'O QUE TEM NA SOPA DO NENÉM?' (with a thinking person icon), 'SERÁ QUE TEM' (with a person icon and a question mark), 'ESPINAFRE' (with a spinach leaf icon), 'SERÁ QUE TEM' (with a person icon and a question mark), 'FEIJÃO' (with a bowl of beans icon), 'SERÁ QUE TEM' (with a person icon and a question mark), 'TOMATE' (with a tomato icon), 'SERÁ QUE TEM' (with a person icon and a question mark), and 'BERINJELA' (with an eggplant icon). Below the menu bar are navigation buttons: '< ANTERIOR', 'PRÓXIMA >', a home icon labeled 'INÍCIO', and a bowl of soup icon labeled 'SOPA DO NENÉM'. The main content area is a grid of five columns and two rows of cards. The first row contains: 'O QUE TEM NA SOPA DO NENÉM?' (with a thinking person icon), 'SERÁ QUE TEM' (with a person icon and a question mark), 'BALINHA' (with three colorful balloons), 'ESPINAFRE' (with a spinach leaf icon), and 'TOMATE' (with a tomato icon). The second row contains: 'FEIJÃO' (with a bowl of beans icon), 'MACARRÃO' (with a plate of spaghetti icon), 'CAMINHÃO' (with a blue truck icon), 'BERINJELA' (with an eggplant icon), and 'É UM, É DOIS, É TRÊS...' (with the numbers '1 2 3' icon).

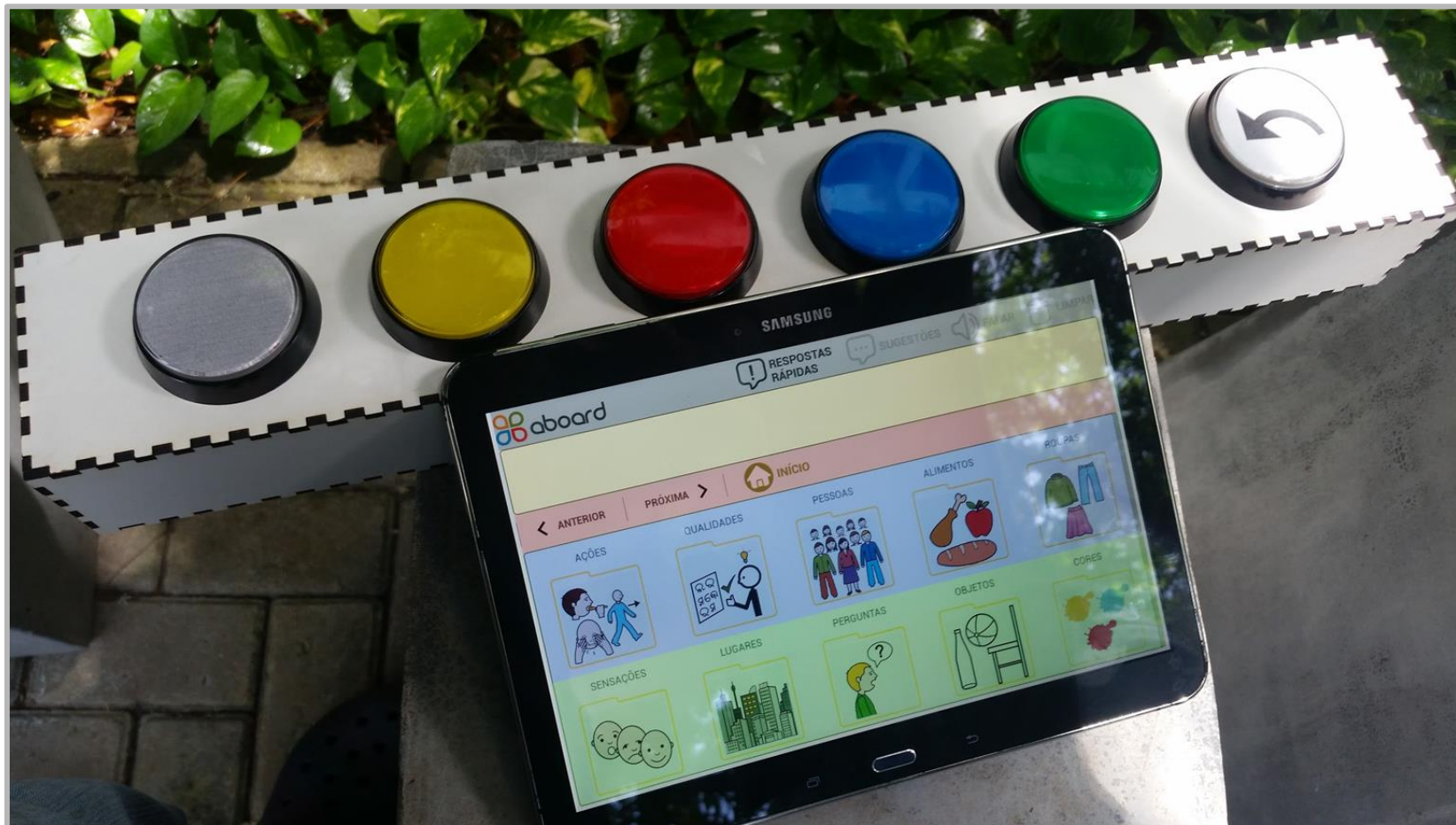
Teaching songs or telling stories

Adaptations for inclusive education

The screenshot shows the 'aboard' app interface. At the top left is the 'aboard' logo. To its right is a large red letter 'D'. Further right are icons for 'RESPOSTAS RÁPIDAS' (a speech bubble with an exclamation mark), 'SUGESTÕES' (three dots), 'FALAR' (a speaker icon), and 'LIMPAR' (a trash can icon). Below this is a horizontal menu with eight items: 'ABRIR A TORNEIRA', 'MOLHAR AS MÃOS', 'PEGAR O SABÃO', 'ENSABOAR', 'MOLHAR AS MÃOS', 'FECHAR A TORNEIRA', 'PEGAR A TOALHA', and 'SECAR AS MÃOS', each with a corresponding illustration. Below the menu is a navigation bar with 'ANTERIOR' (left arrow), 'PRÓXIMA' (right arrow), 'INÍCIO' (house icon), and 'LAVAR AS MÃOS' (handwashing icon). The main content area displays five large cards: 'ABRIR A TORNEIRA', 'FECHAR A TORNEIRA', 'MOLHAR AS MÃOS', 'SECAR AS MÃOS', and 'ENSABOAR', each with a large illustration. Below these are two more cards: 'PEGAR O SABÃO' and 'PEGAR A TOALHA', each with a large illustration.

Teaching routines

News: Accessible keyboard



Next steps ...



Internationalization → English and Spanish

Pivot → social startup + partnerships
(e.g., companies and governments) to
operationalize and evolve the project

Demonstration



Thank you!

Gracias!

Obrigado!



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