ASPREX Fact Sheet

Communication board (or book or cards)

Low technology device, which enables two persons to communicate with each other in the same space. Included are letters, pictures, symbols, and icon sets. Their features include printed boards categorized into topics in a grid of communication resources such as a set of symbols, paintings, icons, real-life pictures, letters, words or objects to represent ideas when communicating with others.

Product Classification

- o APL (WHO Assistive Product Priority List): 9 (Communication boards/books/cards)
- o ISO 9999:2022: 222103 (Letter and symbol sets and boards)

Possible configuration variants

- o Transparent communication boards.
- o Boards with tactile symbols.

Possible accessories or optional components

- Ring binder (to protect the board and card, and to make it easier to have different boards together for multiple communication needs).
- Laminating finish (to protect a single board and card).

Product goals

Activities or functions the product is mainly intended to support, according to WHO ICF Classification:

- Understanding spoken words [d310].
- o Producing nonverbal messages [d335]
- o Holding a conversation [d350].

Indicated impairments

Difficulties the product is mainly intended to address, according to the WHO ICF Classification:

- o Acquiring concepts [d137].
- Mental functions of language [b167].
- o Acquiring concepts [d137].

Contraindicated impairments

Difficulties for which the product may be inappropriate:

- o Lack of communication intention.
- o Blindness. Unless used with variants: Boards with tactile symbols
- o Insufficient consciousness level to enable association of keystrokes with resulting actions.

Indicated environments

Specific environments in which the product should be used: None specified.

Contraindicated environments

Environments in which the product may be inappropriate:

o Places with bad visual conditions (such as dark rooms, bad lighting, glare, reflecting light).

Other indicated factors

Other factors or situations the product is intended to address:

- o Augmenting verbal comprehension.
- Inability to speak due to comprehension impairment (inability to understand and be familiar with a situation).
- o Inability to speak due to motor impairment (neuromotor, muscular, joints, bones).
- Inability to speak due to praxis impairment (ability to spontaneously conceive, organize and carry out a motor act in the correct sequence from beginning to end).

Other contraindicated factors

Other factors or situations in which the product may be inappropriate:

- Need to write messages.
- Need to produce messages with voice output.

Points to be considered in product selection

- o List the tasks the user needs to do with the product and check that the user can actually sustain these tasks.
- Understand the intellectual and language abilities to guide vocabulary, language options and symbol system choice to include several approaches.
- Select the size of the Boards / books/ cards depending on the number of icons per page/ size of icons/ number of pages.
- Boards/ Cards/ Books basic formats include the following components: action words, people, places, personal information, greetings and social exchanges, quick phrases, feelings, food and drinks, adjectives and identifying features, body parts, clothing items, toys or favorite activities, weather, colors, shapes, letters and numbers, school supplies, holidays, question words, age-appropriate slang, School specific activity pages, home specific activity pages.
- o Choose topics that meet the interests and the needs of the person.
- People with significant cognitive limitations may benefit from fewer icons per page, thus requiring lower cognitive load.
- o People with higher linguistic skills may benefit from many icons per page/ board.
- Find out (through appropriate assessment) the user's body functions that are best suited to comfortably access the product: eye gaze, pointing or partner assisted scanning.

Points to be considered in product fitting

- o Make sure that the chosen topics motivate communication for the user.
- Make sure that the icon sizes, the background size, the color and the contrast fit adequately the user's visual capabilities.
- Organize the icons in such a way (number per page, most frequently used ones in easiest to access spots) that allows the user to easily access them.
- o Train relatives on how to communicate with the icons.

Points to be considered in product use

- o Competence in product use is highly context- dependent.
- o It will help if someone mediates the communication and shows how symbols / icons / words can be used to communicate.
- Start with simple models; ask for very motivating things, such as specific songs to be played, or favorite food to be offered.

Points to be considered in product maintenance / follow-up

- o Keep the board safe from breaks or water and protect it (e.g. with a plastic cover).
- Make sure to have reliable contacts that can help with any problem.

Examples of products available on the market

o Live product search in the EASTIN website https://www.eastin.eu/en/searches/products/list?iso=222103

Source

This Fact Sheet was compiled in 2021 by an international team of experts, to provide the initial knowledge base for a project ("An online system to assist the selection of assistive product") supported by the World Health Organization in 2020-2021 within the GATE Initiative (Global collaboration on Assistive Product). Fact Sheets were compiled for each of the 50 types of products included in the WHO APL (Assistive Product Priority List).

The team was composed of Renzo Andrich (Italy, group leader), Natasha Layton (Australia), Stefan von Prondzinski (Italy), Jerry Weisman (USA), Silvana Contepomi (Argentina) and Hasan Minto (Pakistan).

The project led to a prototype online tool called ASPREX (ASSistive PRoduct EXplorer). At the end of the project, it was transferred to a WHO collaborating center (the Global Disability Hub in the UK), in view of possible future developments.