

## Matching Game

Ask someone to think of and briefly describe someone they know (their age, interests, where they live, etc), then ask someone else to describe a typical daily task or goal. Consider the context or situation in which your persona is carrying out their task or goal (e.g. at home in the morning, or in the car on the highway, etc). Feel free to add any information that might help to describe the situation in more detail. Consider an existing product or service that might help your persona accomplish their goal in the given context.

Frame your persona's goal into a list of needs by considering the step-by-step process they might take in accomplishing their goal. Where possible, match these needs up with the features associated with your product or service.

## Cause and Effect

This activity demonstrates the potential to have a broader beneficial impact with our everyday actions. The challenge is to define a possible chain of events that could take you from a specific cause to an effect.

Causes defined in this exercise are everyday tasks such as:

- share meeting minutes in a form that your colleague using a screen reader can access, or
- coach an employee in managing a pension.

While the effects might include:

- grandmother in Ecuador connects with children in LA, or
- polar bear is saved from ice flow in Alaska.

The effects are as far away from the causes as possible.

## Cause and Effect

Use the accompanying card deck of causes and effects, or think up your own examples. These should be as specific and diverse as possible, and the relationship between cause and effect should not immediately be clear.

### Step 1

Choose a random card from the Cause deck, then do the same from the Effect deck. Or describe your own cause and effect.

### Step 2

Define a chain of effects that takes you all the way from the initial cause to the final effect. Record each effect and map out the chain of effects - allowing branching or multiple paths where they emerge.

### Why

- Interconnectedness
- Virtuous Cycles

## Matching Game

Decide whether or not your persona was able to accomplish their goal using the product or service you have selected. Were their needs met at each step? If not, consider how you might redesign this product or service in a way that would allow them to succeed, keeping in mind the principles, practices and tools of inclusive design.

### How

- Personas

### Why

- One-Size-Fits-One
- Disability as Mismatch

## Inclusive Design Mapping (1/2)

This activity is intended to be used in the context of co-design, where a diverse set of co-designers, including people who presently have difficulty using the design, are active participants in the design process.

The exercise is about **stretching and reaching**: to include people who are currently at the edges and who are therefore usually excluded from the design process. It is also about **balance and flexibility**: creating a design that does not compromise the experience of one person to make room for the requirements of another.

In this activity, co-designers choose appropriate facets (or “slices”) from the accompanying set of **Inclusive Design Mapping facets**, to piece together a map of user needs as well as the functional requirements of a product or service. Once mapped, gaps between needs and requirements can then be identified.

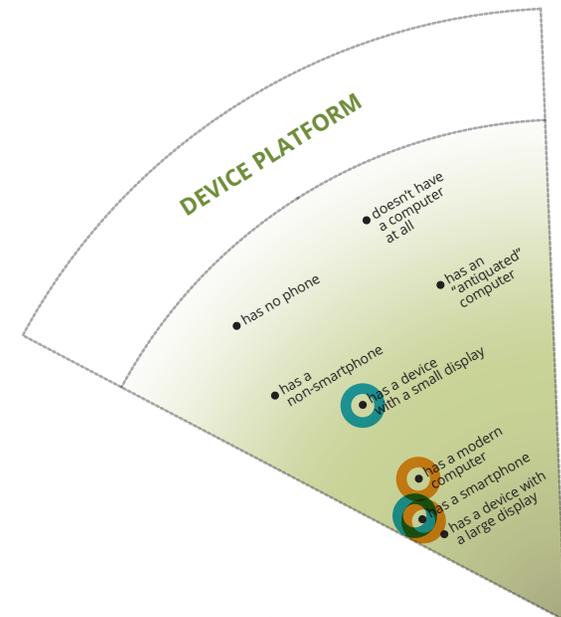
## Inclusive Design Mapping (2/2)

### Step 1

Choose the facets from the deck that are relevant to the needs, preferences and the context you are designing for or critiquing.

### Step 2

Map your needs, preferences and context on the selected facets. Next, using a different color, map the product/task/solution you are trying to critique or design.



## Inclusive Design Mapping (2/2)

### Step 3

Now you can put the facets together, draw a jagged outline, and shade in the gap between the two outlines (see example diagram).

### Step 4

Once you have a proposed new design, redo the map, with the goal of fully encompassing the jagged outline of the edge users (see example diagram). While iterating through the design process, the mapping can be very useful for identifying where your design does not stretch enough to meet the needs of edge users.

## Inclusive Design Mapping (1/2)

This activity utilises the accompanying **Inclusive Design Mapping facets** card deck. Co-designers are able to create their own facets if they can't find a desired state or context within the provided set.

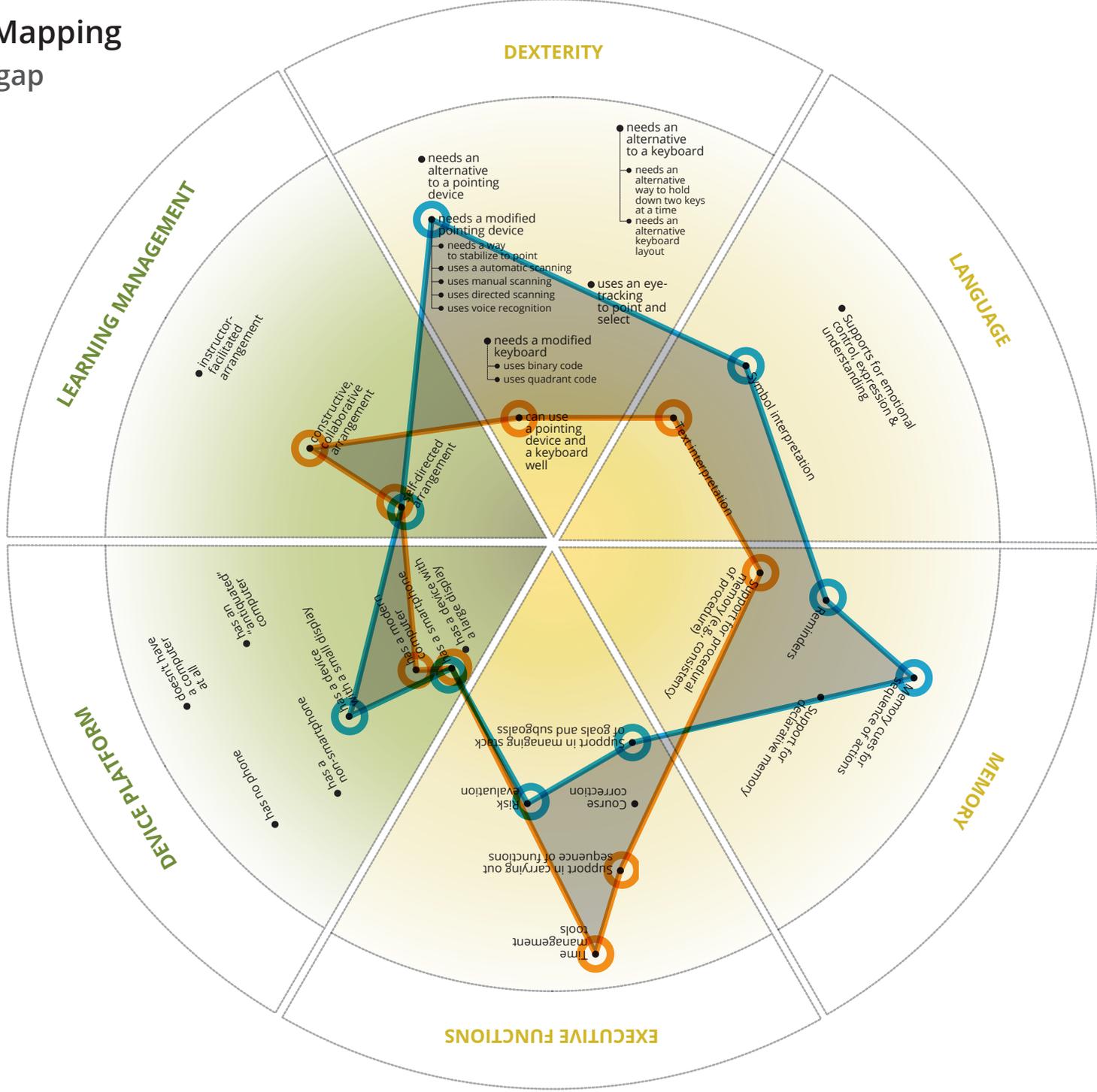
### Why

- One-Size-Fits-One
- Disability as Mismatch
- Interconnectedness

# Inclusive Design Mapping

## Step 3: Finding the gap

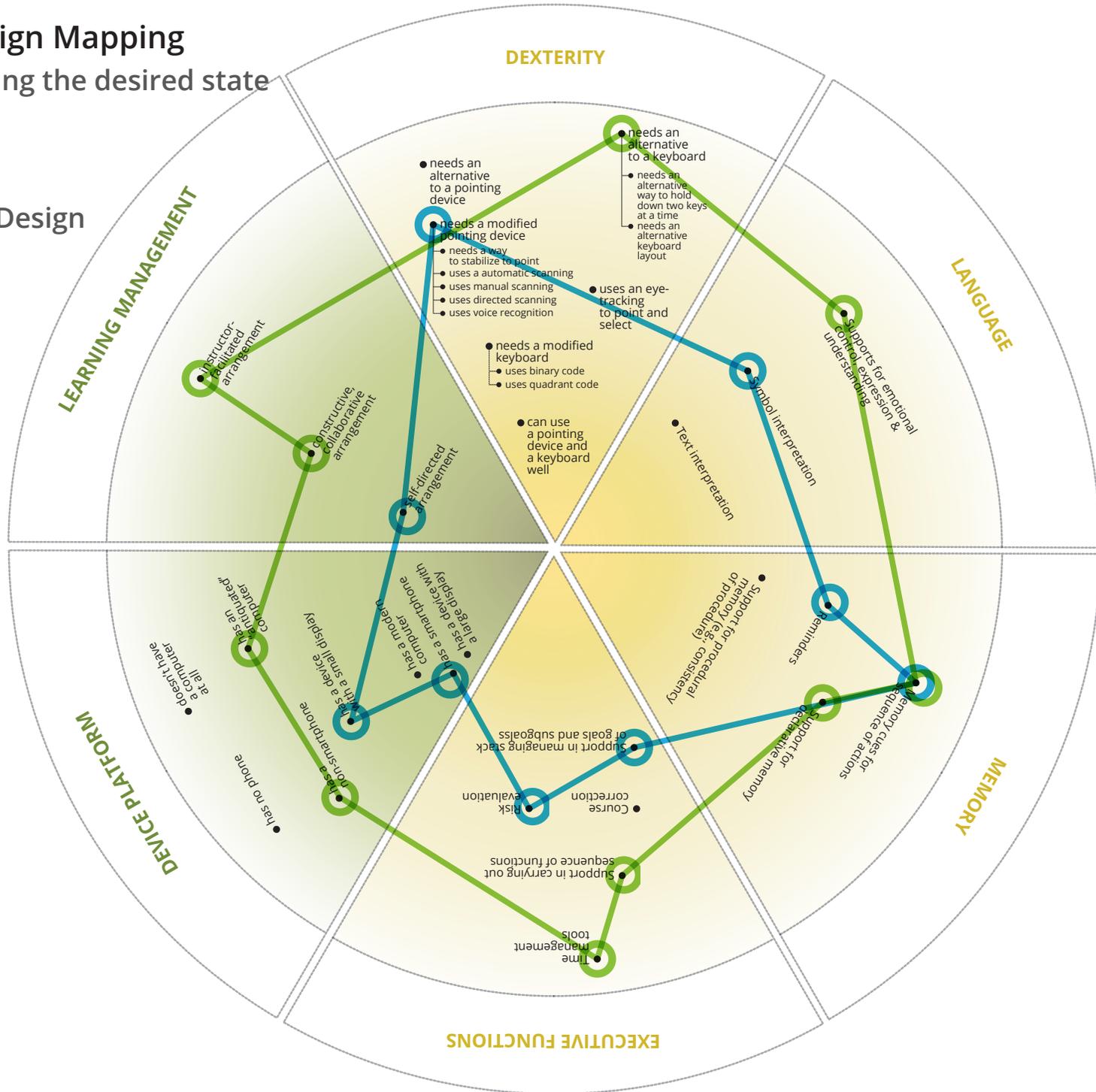
- Yourself
- Product



# Inclusive Design Mapping

## Step 4: Proposing the desired state

- Yourself
- Proposed Design



## DEXTERITY

- needs an alternative to a pointing device

- needs a modified pointing device

- needs a way to stabilize to point
- uses a automatic scanning
- uses manual scanning
- uses directed scanning
- uses voice recognition

- needs a modified keyboard

- uses binary code
- uses quadrant code

- can use a pointing device and a keyboard well

- needs an alternative to a keyboard

- needs an alternative way to hold down two keys at a time
- needs an alternative keyboard layout

- uses an eye-tracking to point and select

## LEARNING MANAGEMENT

- instructor-facilitated arrangement

- constructive, collaborative arrangement

- self-directed arrangement

## SENSORY

- needs an alternative to all visual information

- needs braille
- needs tactile graphics

- needs an alternative to colours

- needs to enhance visibility

- needs an alternative to aural interactions

- can hear well
- can speak well
- can see well

- needs to enhance audio

- needs an alternative to all audio

## COGNITIVE

- needs simplified layout
- needs simplified content
- finds the page layout readable
- finds the content understandable

## COMMUNICATION

- needs text to be read aloud
- needs sign language
- needs a translation of this language
- understands this language
- is fluent in this language

## TEMPORAL

- adapts interaction to all sessions
- prefers shorter interaction sessions
- prefers longer interaction sessions

## SOCIAL

- frequent distractions
- occasional distractions from the physical context
- occasional distractions from email and social networks
- noisy context
- quiet environment
- no distractions

## INTERNET ACCESS

- needs to interact without internet
- has occasional access to low speed internet
- has ready access to low speed internet
- has occasional access to high-speed internet
- has ready access to high-speed internet

## DEVICE PLATFORM

- doesn't have a computer at all
- has a computer
- has a non-smartphone
- has a smartphone
- has a device with a small display
- has a device with a large display
- has a modern computer
- has a smartphone
- has a device with a large display

## PERCEPTION

- Prefers auditory
- Prefers visual
- Prefers kinesthetic
- Redundant information

## MATHEMATICAL THINKING

- Number interpretation
- Symbol interpretation
- Supports for mathematical reasoning

## EXECUTIVE FUNCTIONS

- Support in managing stack of goals and subgoals
- Course correction
- Support in carrying out sequence of functions
- Time management tools
- Risk evaluation

## ATTENTION

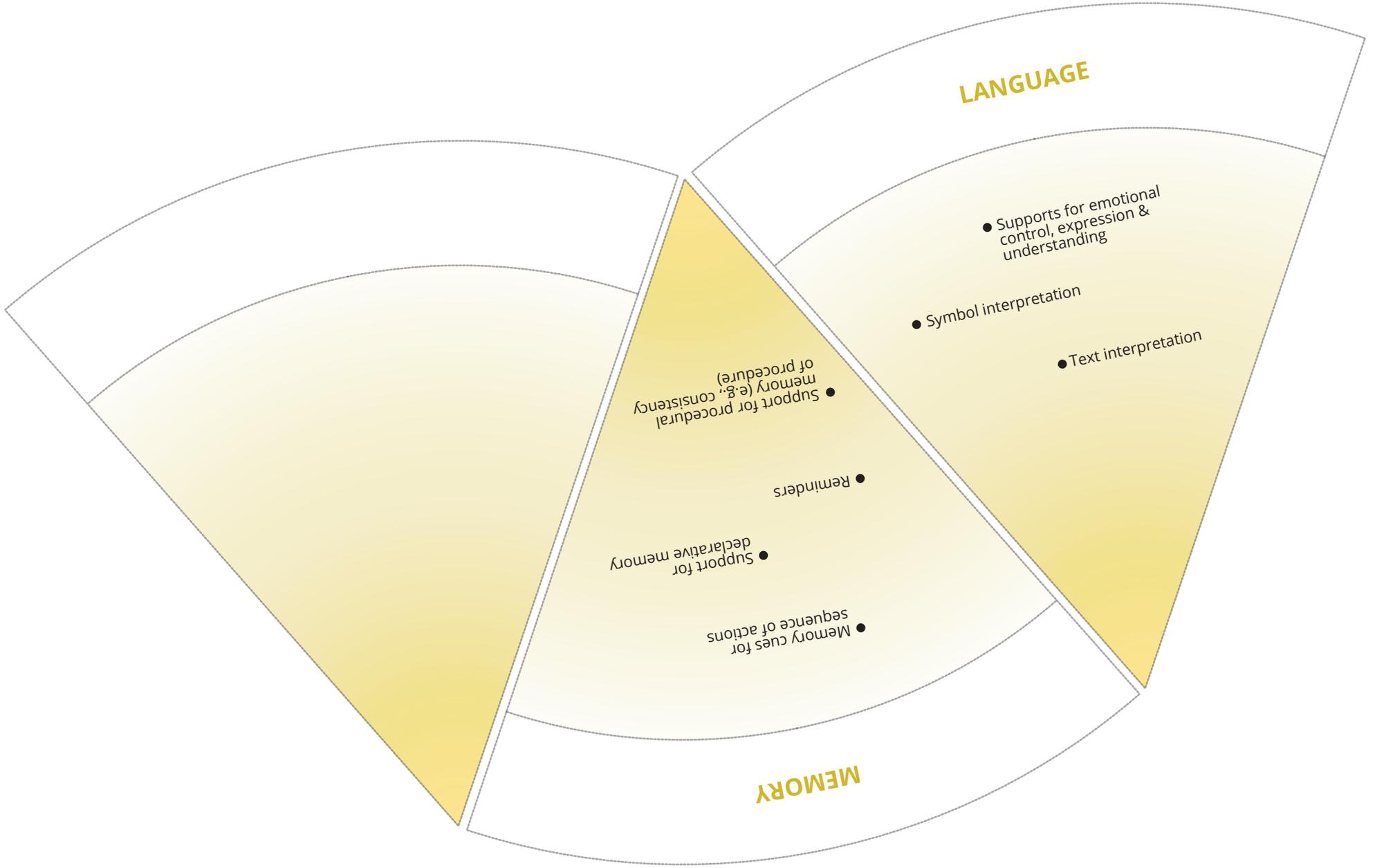
- Personalized audio background
- Personalized visual background
- Figure-ground supports (e.g., simplified or emphasized)

## SPEED OF REASONING

- More time or no time limit
- Logic tracking support

## PROBLEM SOLVING

- Decision supports
- Personalized mental models
- Navigation supports
- Evaluation tools
- Research tools
- Error management supports



## LANGUAGE

- Supports for emotional control, expression & understanding
- Symbol interpretation
- Text interpretation

## MEMORY

- Memory cues for sequence of actions
- Support for declarative memory
- Reminders

- Support for procedural memory (e.g., consistency of procedure)