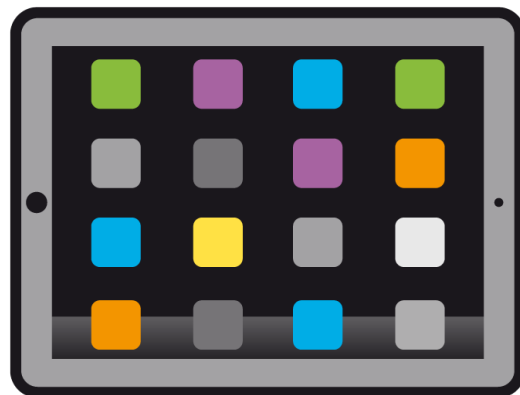




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AAC on the iPad

Summer School for Assistive Technology 2016
FH Technikum Wien
Nina Fröhlich
nina.froehlich@gmx.de

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about isaac

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Gesellschaft für
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Gesellschaft für Unterstützte Kommunikation e.V.

International Society for Augmentative and Alternative Communication

- www.isaac-online.org
- since 1983
- Office in Toronto
- 63 countries
- 14 Chapters in countries or regions around the world (USA, Canada, Sweden, Australia...)
- ISAAC members include people who use AAC, their families, therapists, teachers, students, doctors, researchers, organizations and companies that make communication aids.



isaac-Chapters

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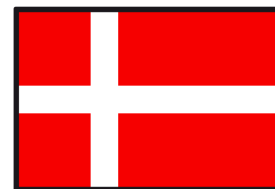
Australia



Brazil



Canada



Danmark



French-speaking
Countries and
Regions



India



Israel



Italy



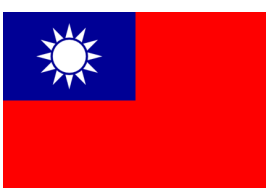
Netherlands
and Flanders



Norway



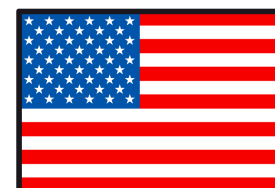
Sweden



Taiwan



United
Kingdom



United States
of America

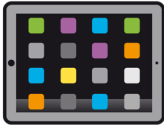
~~German-speaking
Countries and Regions~~



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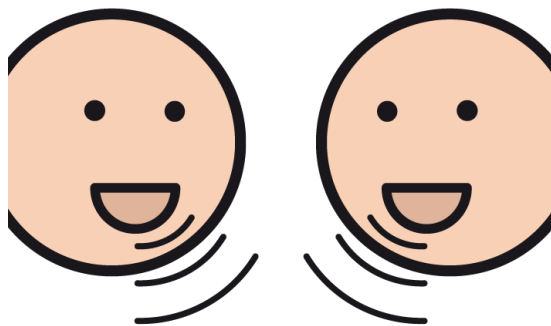
programm

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- What is Communication? 
- What is AAC? 
- AAC based on iPads 
- useful iOS Settings 
- AAC Apps for the iPad 
- GoTalkNow - Practice 



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What is Communication?

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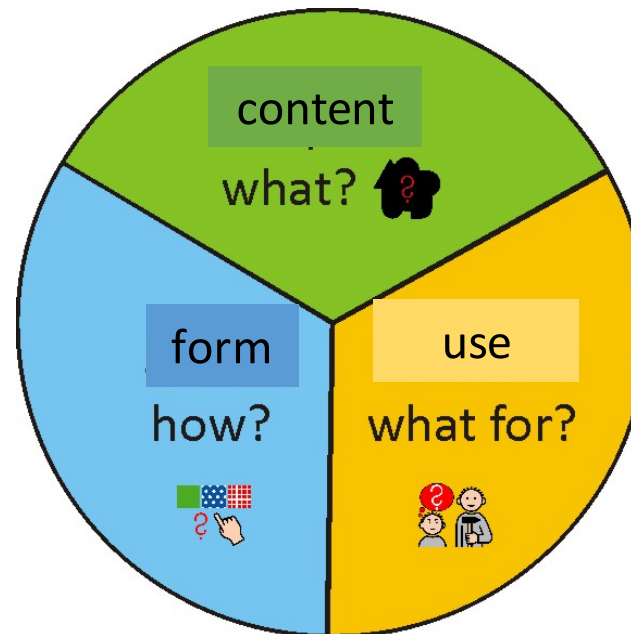
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What is communication?

Gesellschaft für Unterstützte Kommunikation e.V.

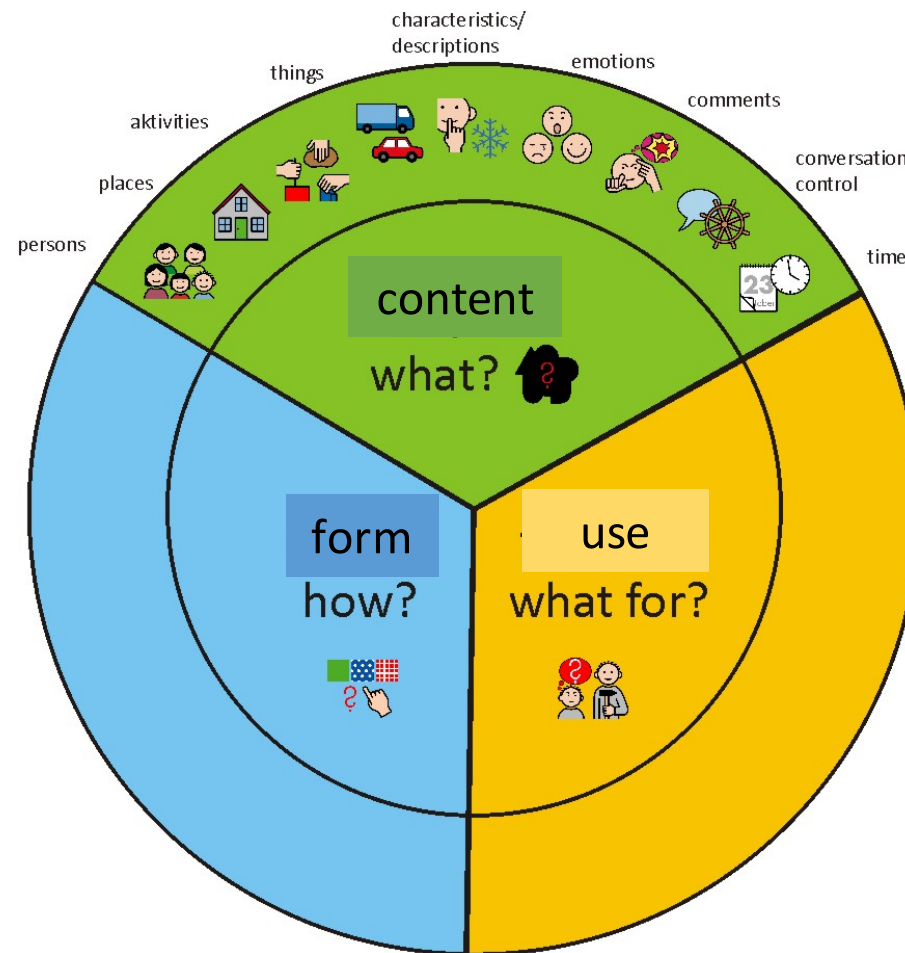
Bloom & Lahey: Model of Language (1978)





What is communication?

Gesellschaft für Unterstützte Kommunikation e.V.

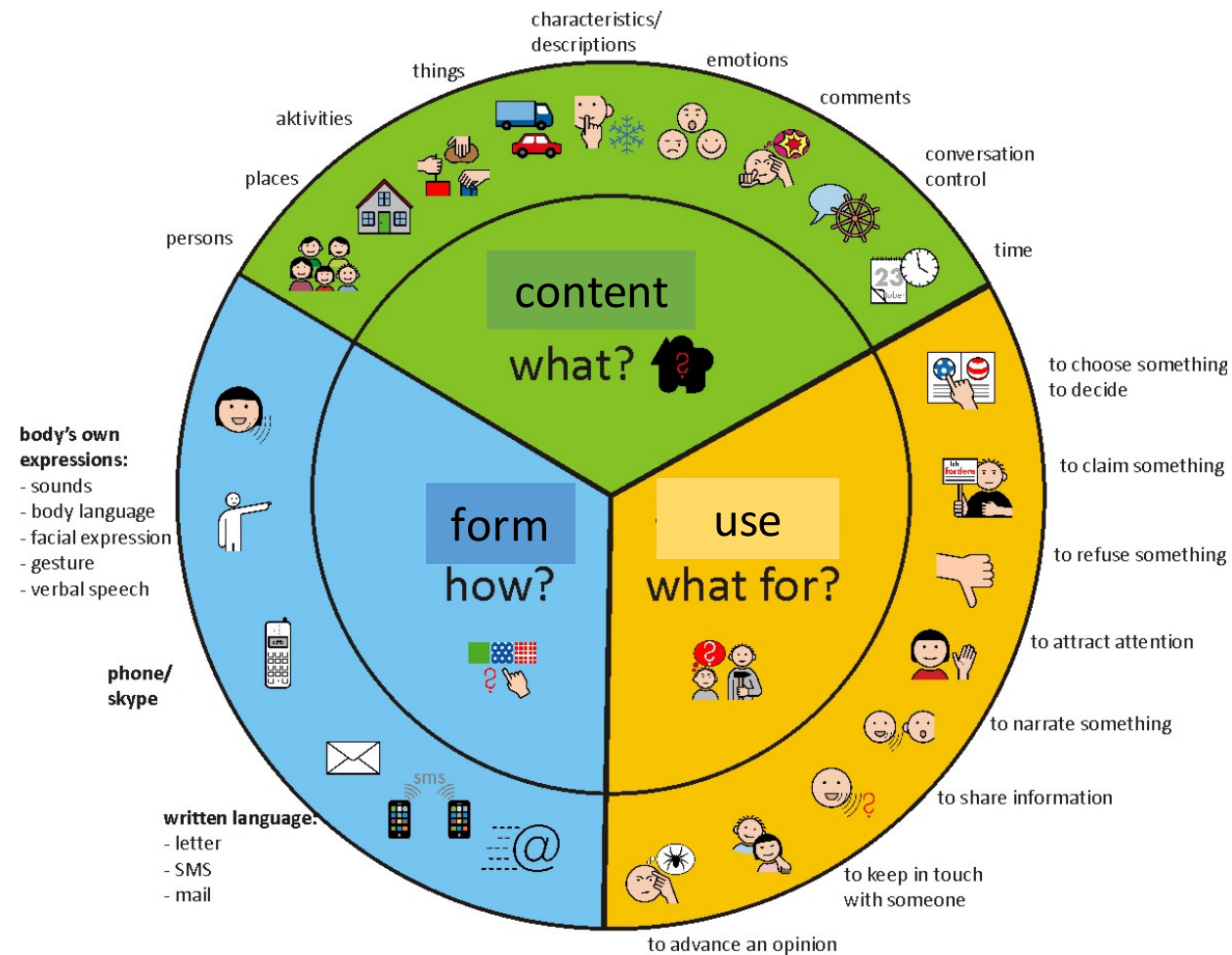






What is communication?

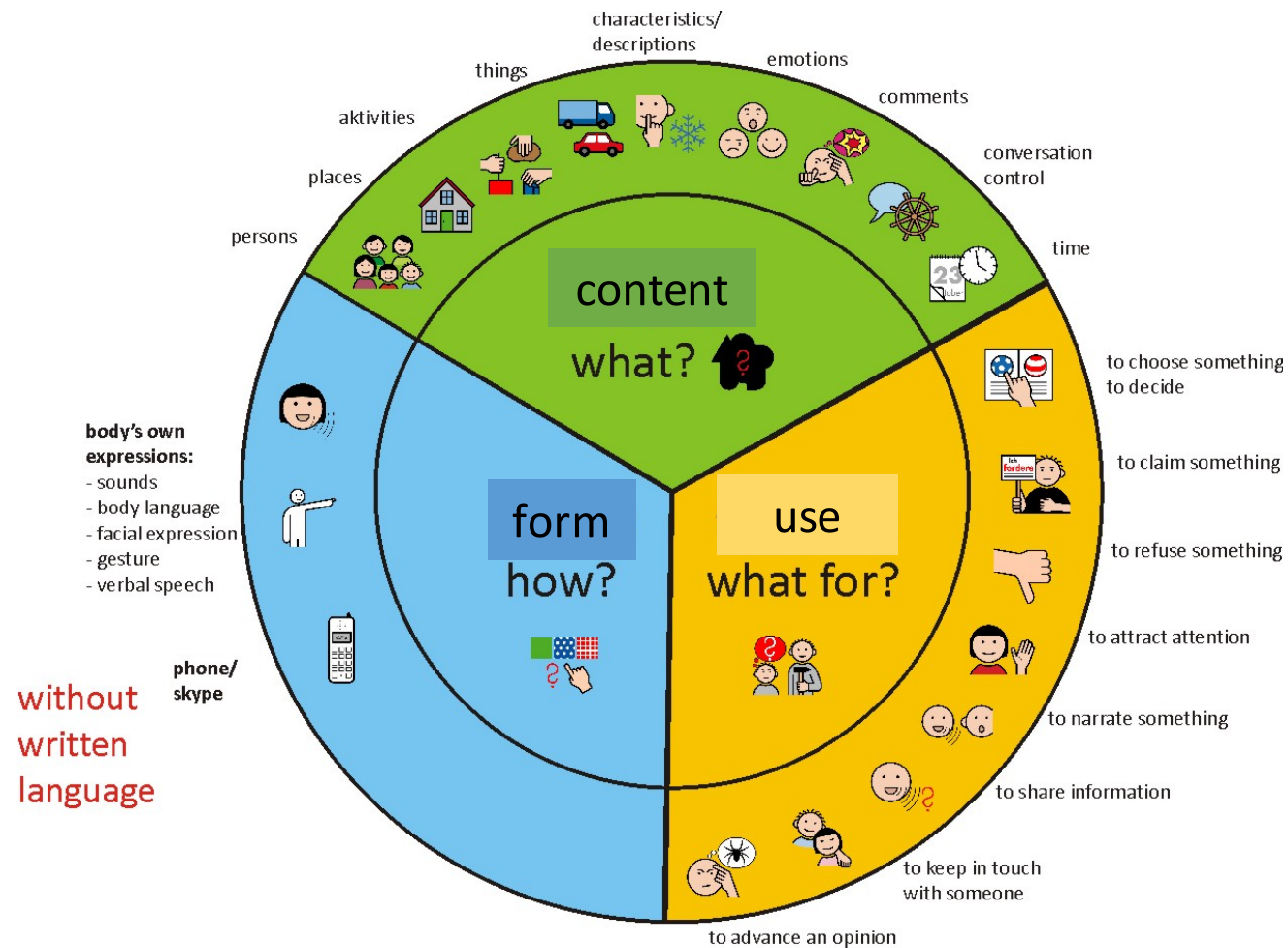
Gesellschaft für Unterstützte Kommunikation e.V.





What is communication?

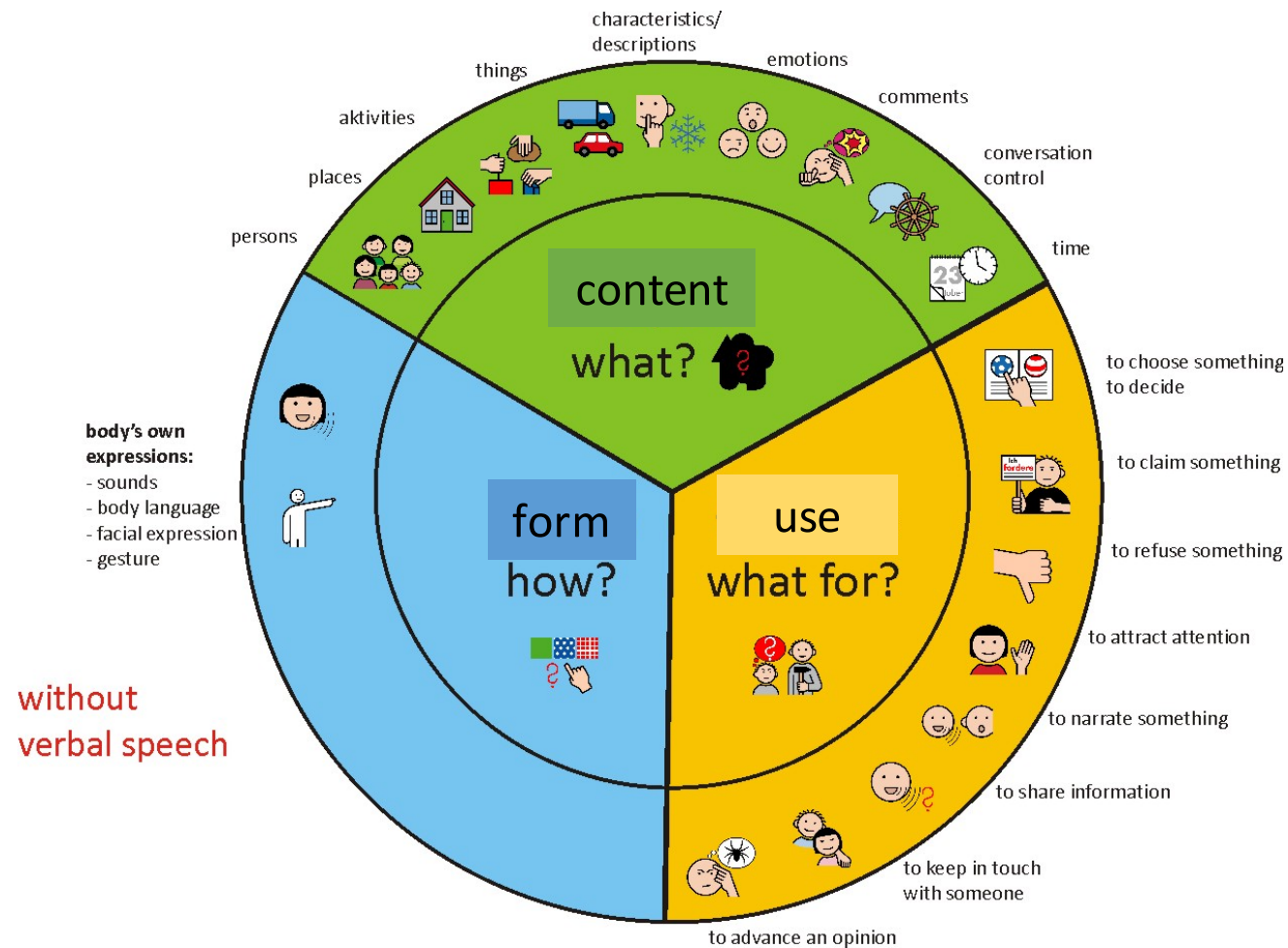
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What is communication?

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People without verbal speech

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Many people are not able to use verbal speech for communication.

This could be:



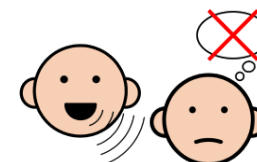
inborn or acquired



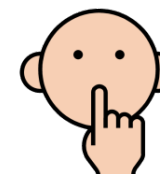
permanent or temporary



not at all or rarely



with intimate persons only or
under convenient circumstances only





People without verbal speech

Consequences

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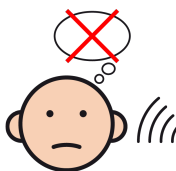
- Someone decides for them.



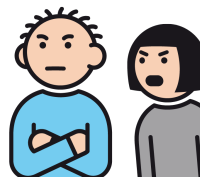
- They cannot ask for the information they need.



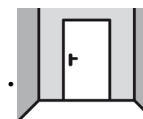
- Others don't understand them.



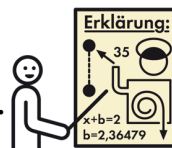
- Others don't take them seriously.



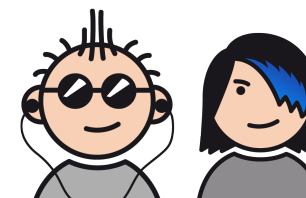
- Communication is restricted to the actual situation.



- They cannot show, what they know.



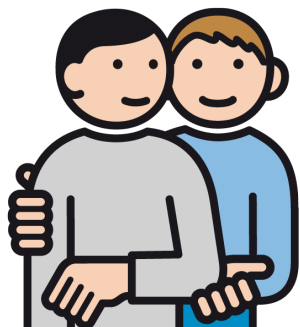
- They cannot express themselves and develop their identity.





People without verbal speech

That means...

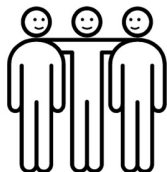


Dependence ...

... instead of ...

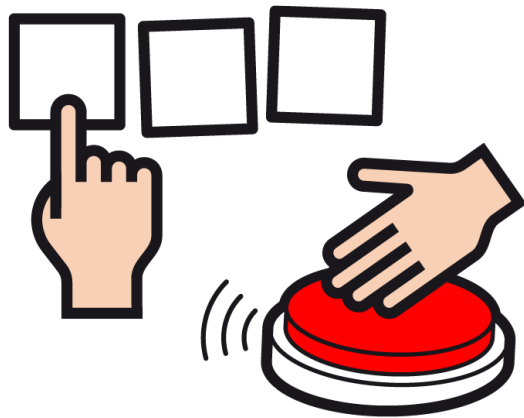
... self-determination, 

... identity development, 

... partizipation. 



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What is AAC?

Augmentative and Alternative Communication

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What is AAC?

AAC's assumptions

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AAC assumes, that every individual
wants to express itself
and has a need for communication.

Based on actual competences AAC develops
individual methods ...
... for a better communication
... and more self-determination.



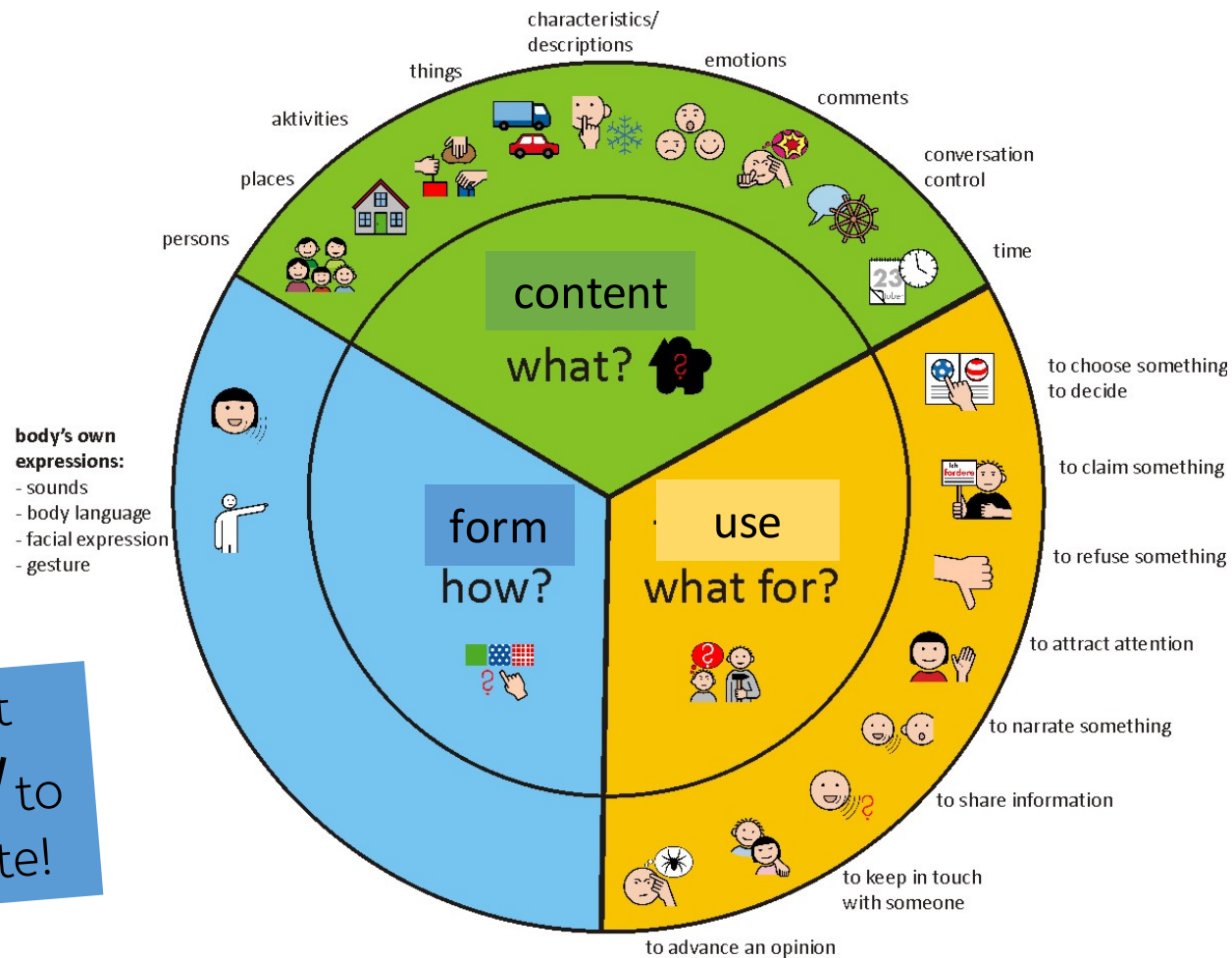


What is AAC?



AAC – HOW to communicate

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AAC is about
the **HOW** to
communicate!

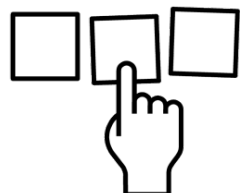
What is AAC?

HOW to communicate

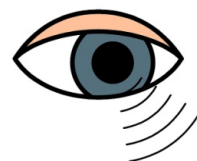
Gesellschaft für Unterstützte Kommunikation e.V.



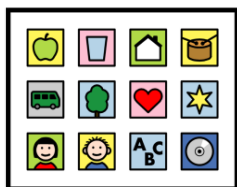
hand signs



picture cards



lines of sight



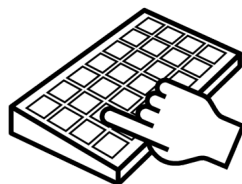
communication books



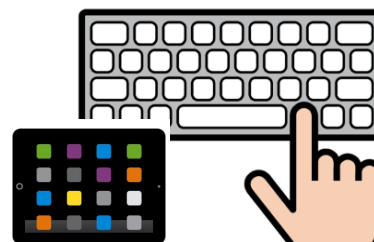
Communication
passports



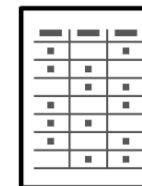
low tech devices for
recorded voice



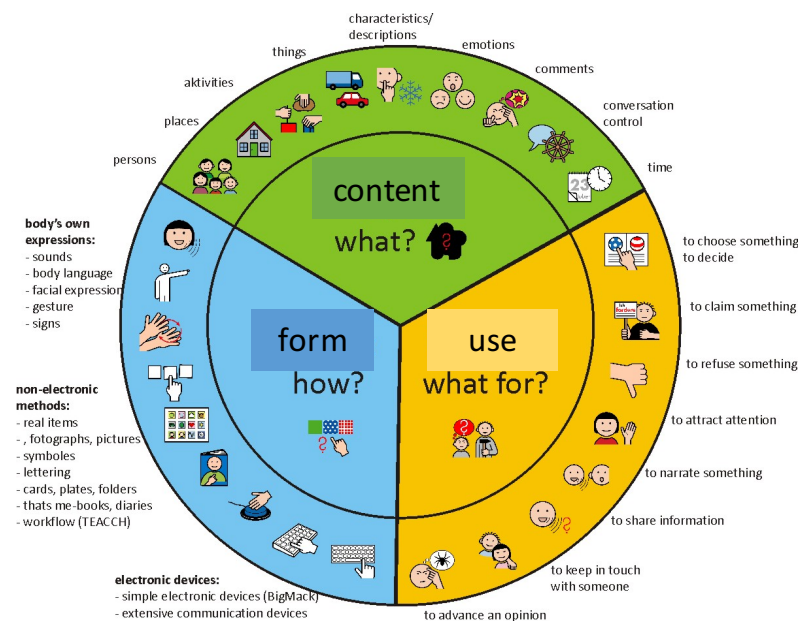
high tech devices with
synthesised voice



computers and
tablets



visualization
(TEAACH)



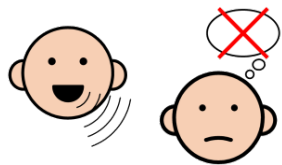
What is AAC?

AAC

AAC = augmentative and alternative communication



for people without verbal speech



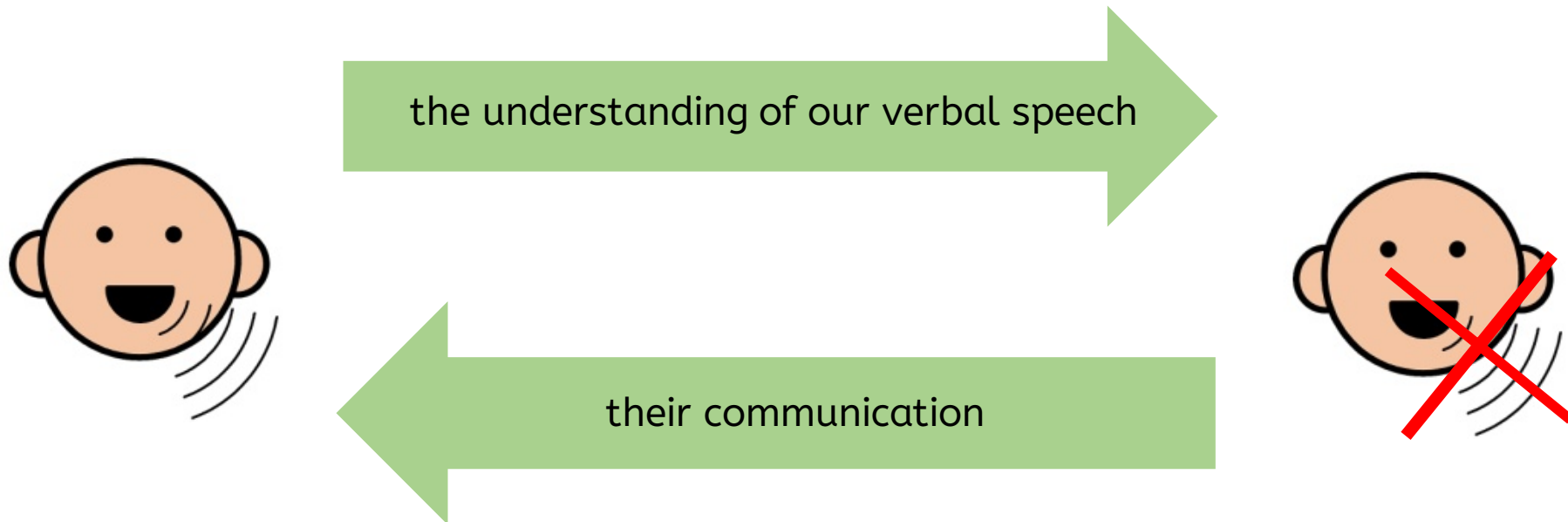
for people with limited verbal speech



What is AAC? two ways

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ACC will improve both:



I will NOT talk about

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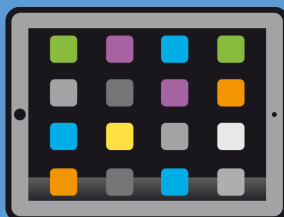
~~hand signs
picture cards
communication books
personal communication passports
visualizations (TEAACH)
low tech devices~~



I will talk about

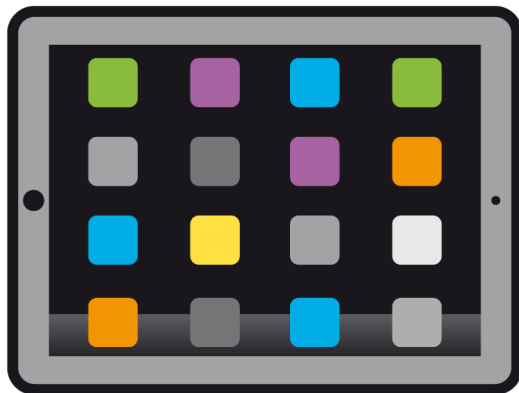
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high tech AAC devices
based on iPads





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high tech AAC devices
based on iPads

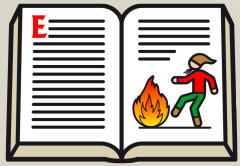
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What about you?

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- Any experiences with iPads?
- Own iPad/iPhone?
- Other tablet?
- Any experiences with Accessibility-tools?



AAC based on iPads

Once upon a time...

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... we had no iPads.



... but we already had high tech AAC devices.



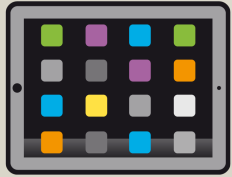
1000,-



AAC based on iPads

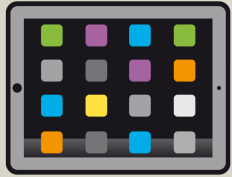
AAC devices are expensive

- hardware with the required touchscreen technology was not common, but existed already as a niche product
- software/vocabulary development is expensive
 - linguistic difficulties: how to organize the vocabulary and make every single word accessible with pictures for non-readers
 - every language is unique: the software will be used by a handful users in each country
- some companies focus on AAC devices (Tobii, Dynavox, Prentke Romich): they sell hardware, software, accessibility features (f.e. eye tracking) and their service as a whole
- high tech AAC devices are expensive: 5.000-20.000 €
- in some countries the health insurance has to finance the AAC devices
 - in most countries they have to be self-financed



AAC based on iPads the iPad-revolution

- tablets with touchscreen-technology now are produced for a big population as a common lifestyle product
 - that decreases the costs
- AAC professionals developed apps that are now available on the App-Store
 - everybody may buy these apps directly without any need to involve companies for AAC devices
- schools, speech therapists, families just buy the AAC-App for their already existing iPad
 - that increases competence and knowledge



AAC based on iPads the iPad-revolution

Why are we talking about iPads?
And not about Android
or Windows devices?
That would make it cheaper at all...



- US: Apple is leading in education: and most AAC Apps are developed for the US market at first... so the developers choose iOS for their OS
- Apple developed great accessibility features for the iPads: that makes it easier for handicapped people to use iPads



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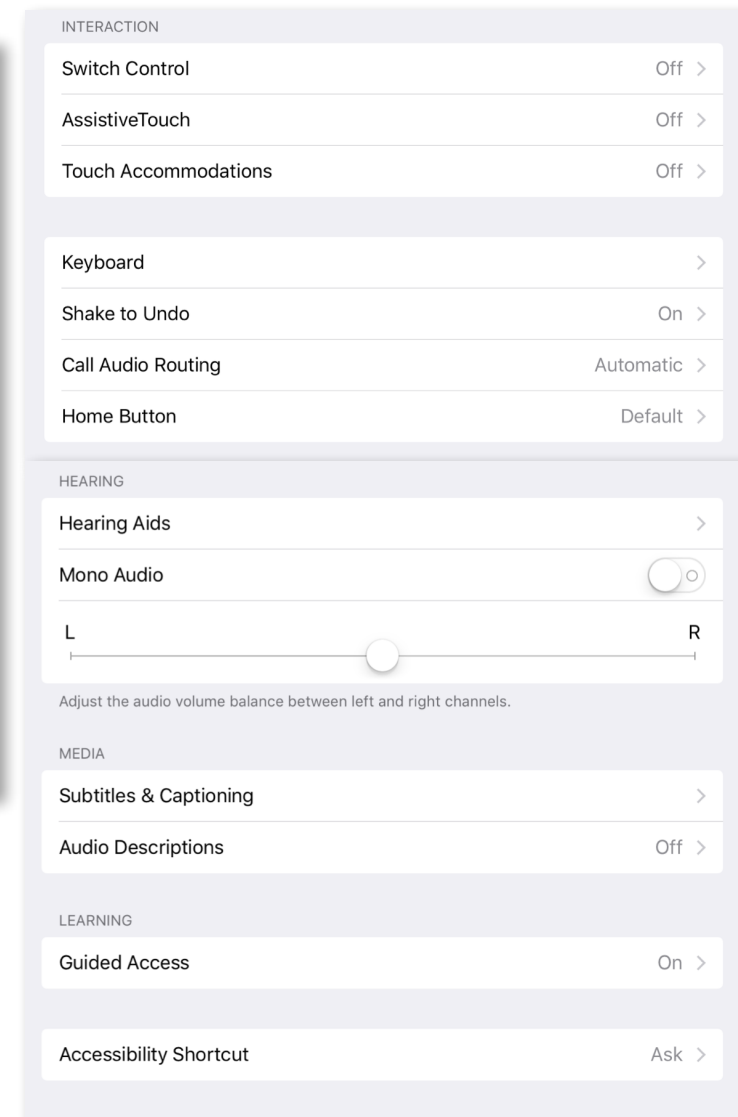
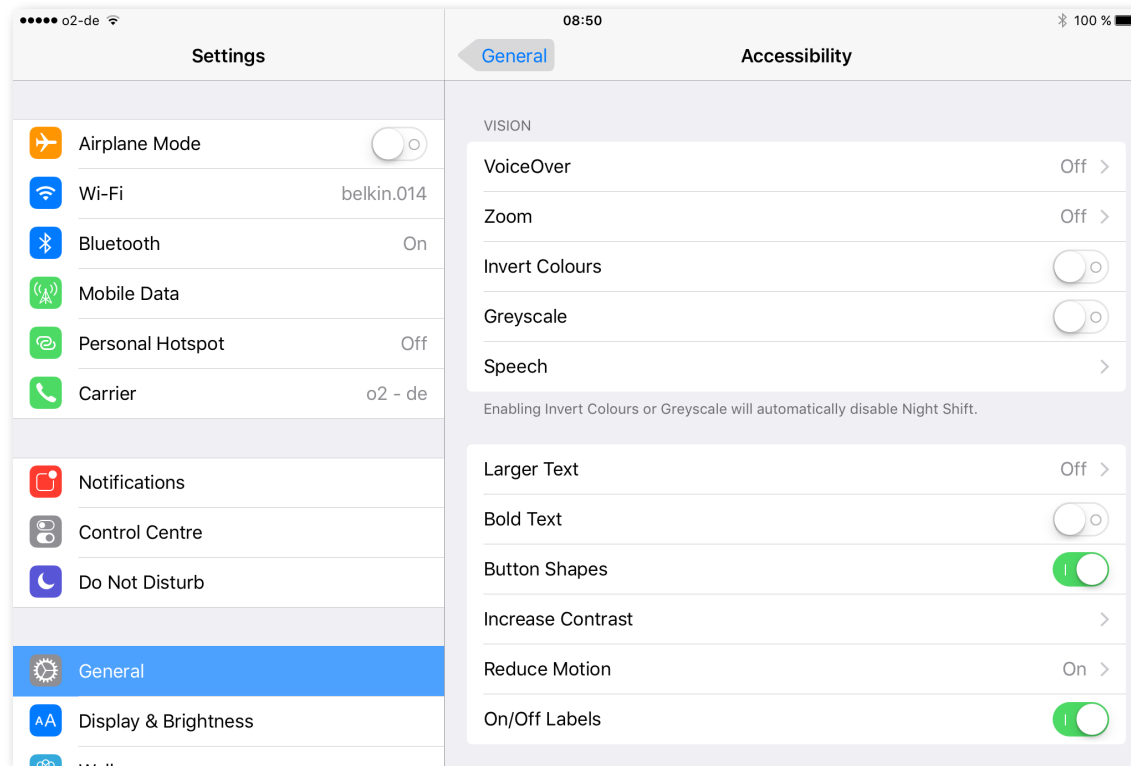
useful iOS settings

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Accessibility features in iOS

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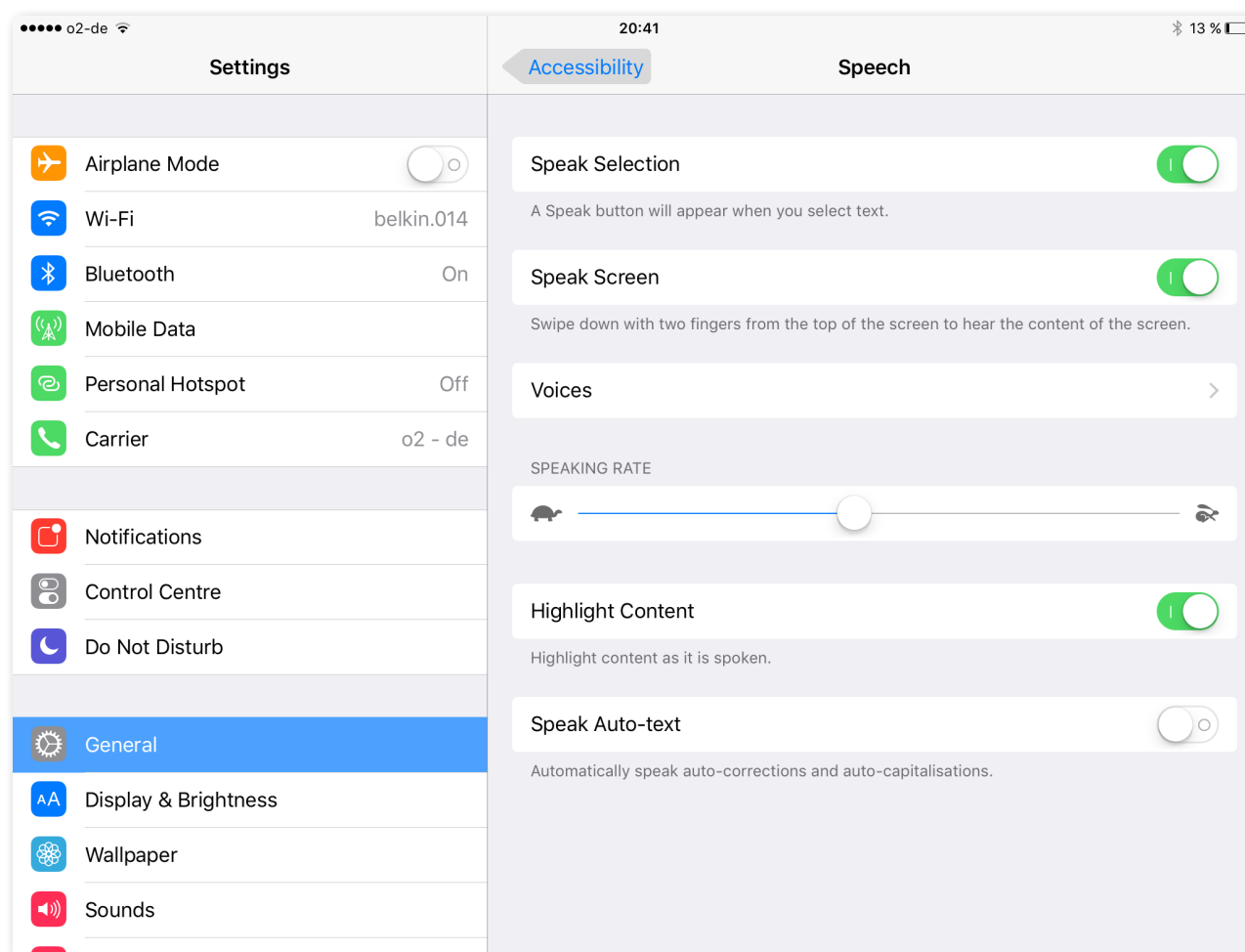




Accessibility

Speech – features for non-readers

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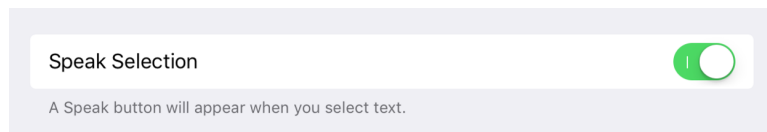




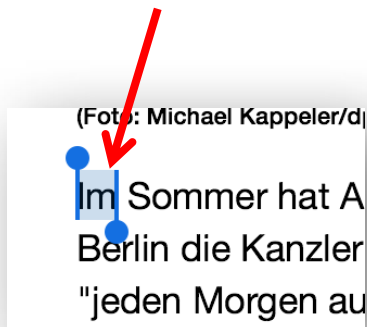
Accessibility Speak Selection

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1. Turn on „Speak Selection“ in Settings.



2. Long-Press the text. The word will be highlighted.



3. Enlarge the highlighting to the whole text.



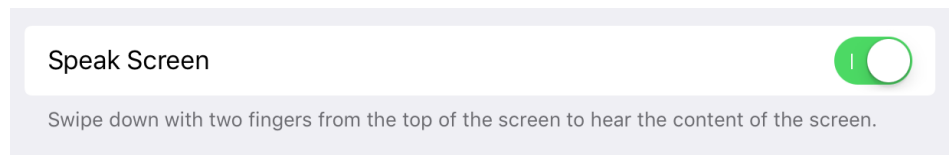
4. Tap „Speak“.



Accessibility Speak Screen

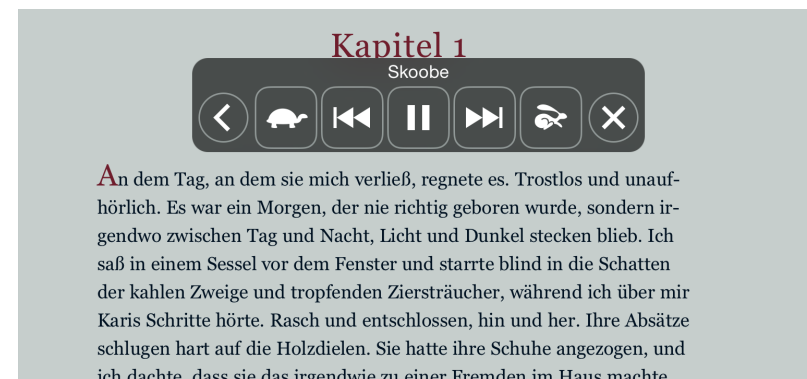
Gesellschaft für Unterstützte Kommunikation e.V.

1. Turn on „Speak Screen“ in Settings.



2. Swipe downwards with two fingers.

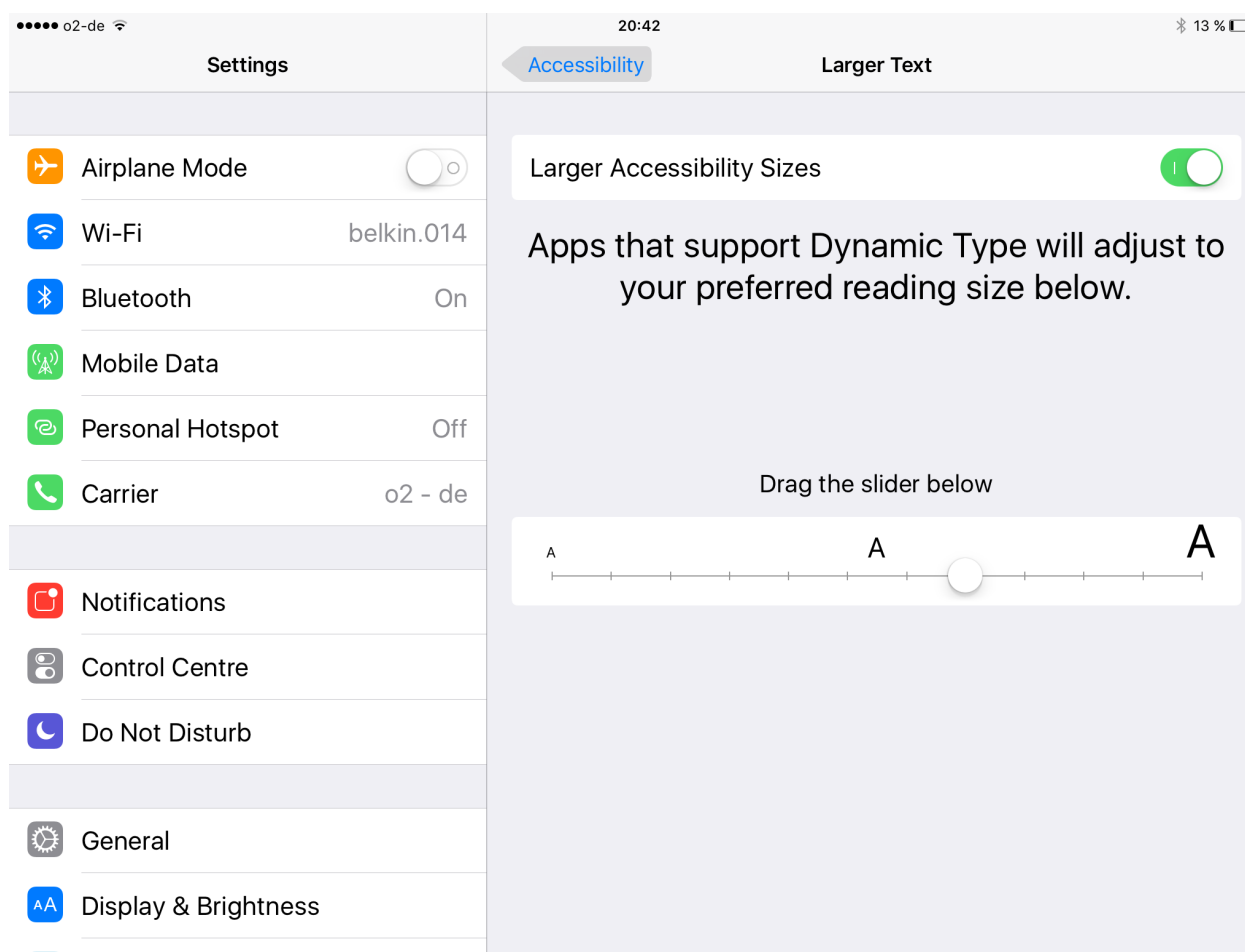
3. The iPad starts to speak all text on screen. You may skip, stop and change speed in the Popup.

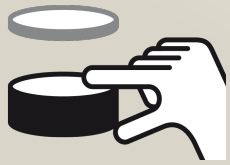




Accessibility

Larger Text

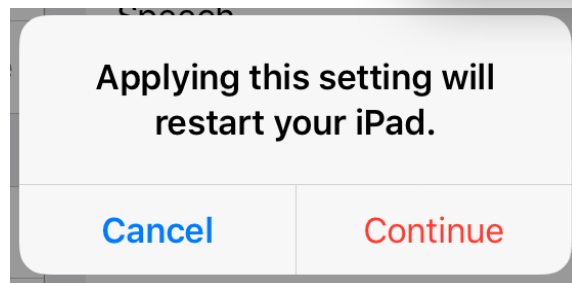
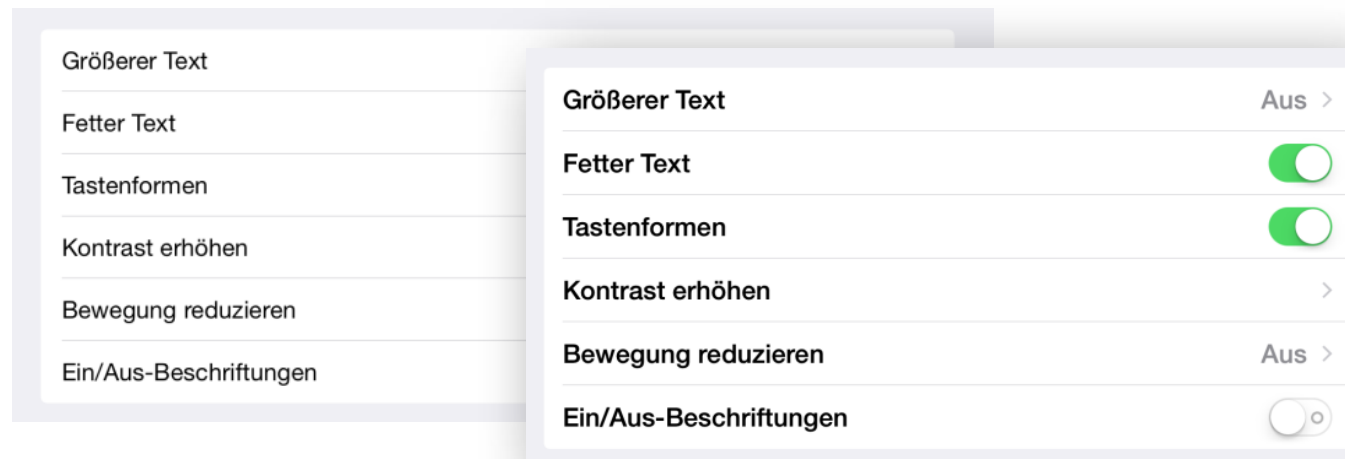




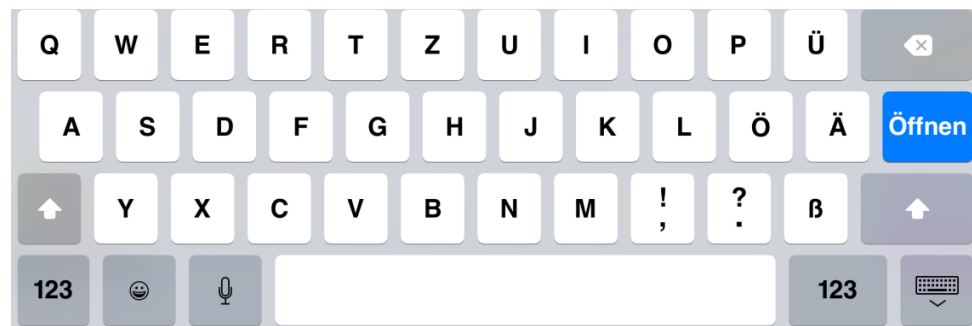
Accessibility

Bold Text

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„Bold Text“ also modifies the keyboard.





Accessibility

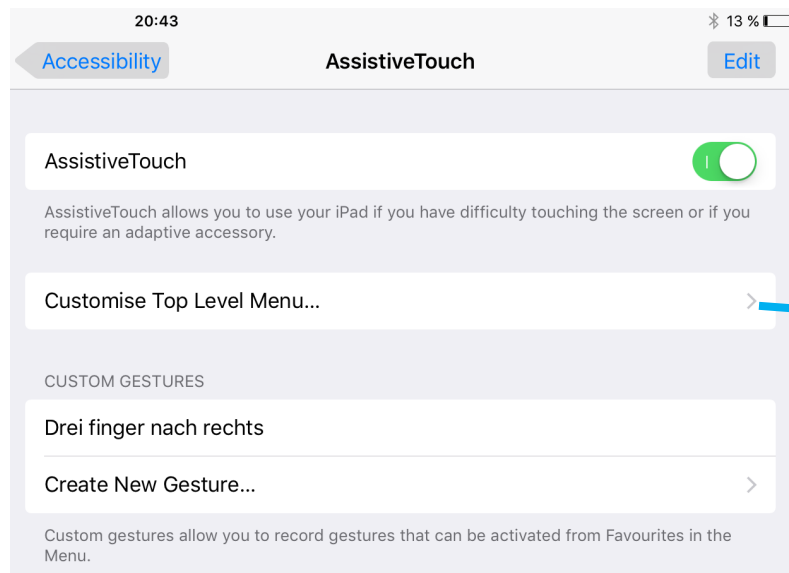
Switch Control





Accessibility

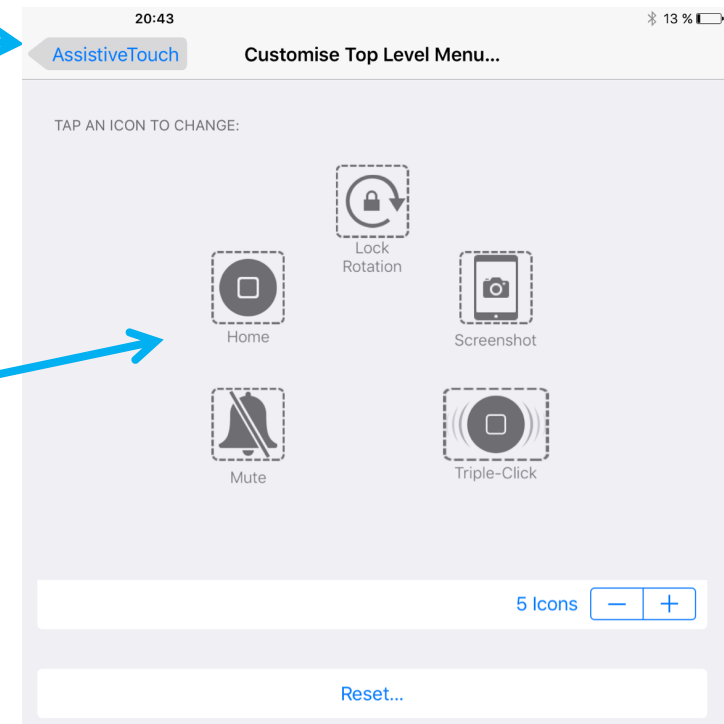
Assistive Touch

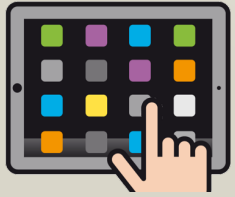


Assistive Touch offers that little button on the screen. By tapping it a menu with easy accessible alternatives for the iPad switches (Home-Button, Volume, ...) appears.



Individualize the AssistiveTouch-Menu.

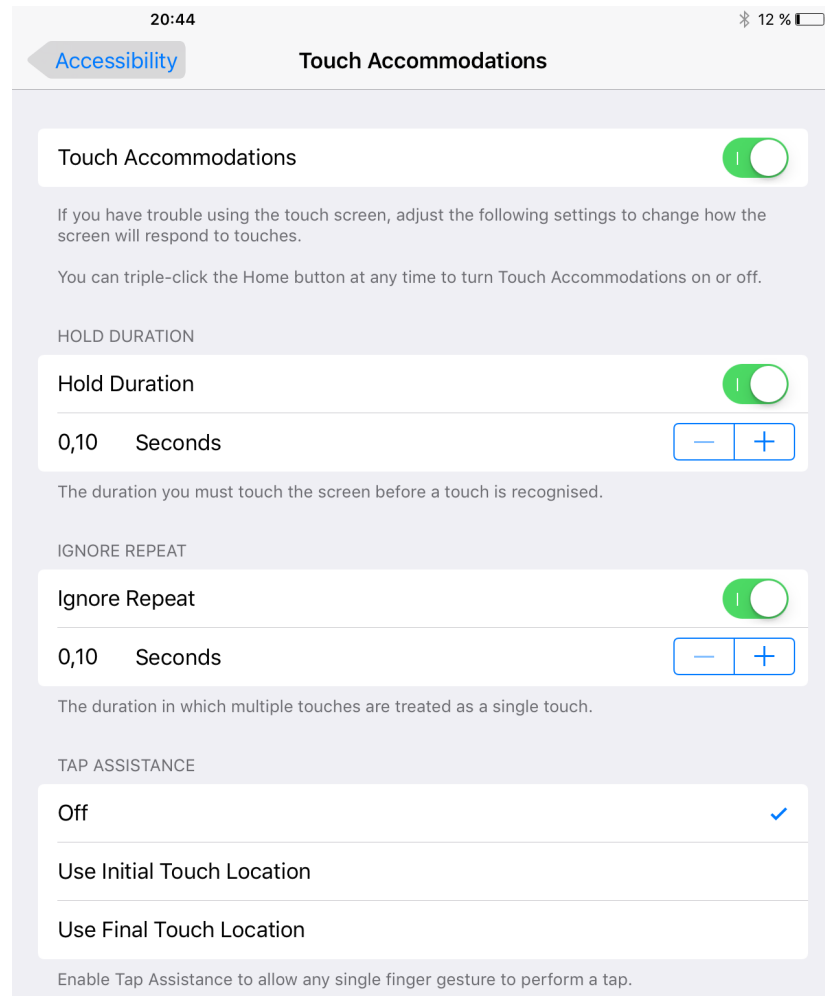




Accessibility

Touch-Anpassungen

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Hold Duration:

The duration you must touch the screen before a touch is recognised.

Ignore Repeat:

The duration in which multiple touches are treated as a single touch. (f. e. for people with tremor)

Tap Assistance:

Prevents accidentally gestures. Long-press before or in the end of the gesture to trigger the gestures command.

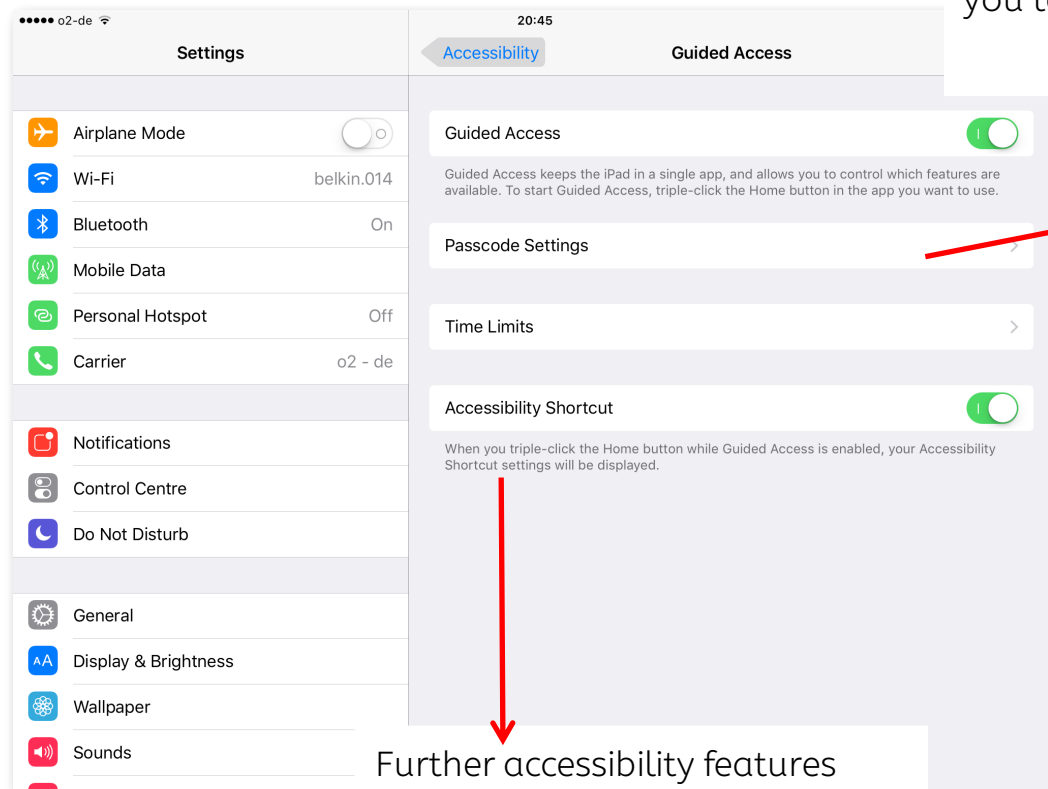


Accessibility

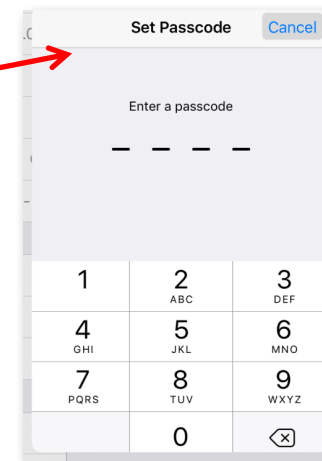
Guided Access

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Guided Access keeps the iPad in a single app, and allows you to control which features are available.



Further accessibility features may be started while the access is guided.



Turn on “Guided Access”, enter a Passcode (twice), close “Settings” and open the App.



Accessibility

Guided Access

Gesellschaft für Unterstützte Kommunikation e.V.

Tripple-click the Home-Button.

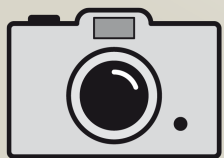
End Guided Access Resume

Circle areas on the screen you would like to disable.

Chose Options for Hardware-Buttons (Volume, Standby, ...)

Circle areas on the screen you would like to disable.

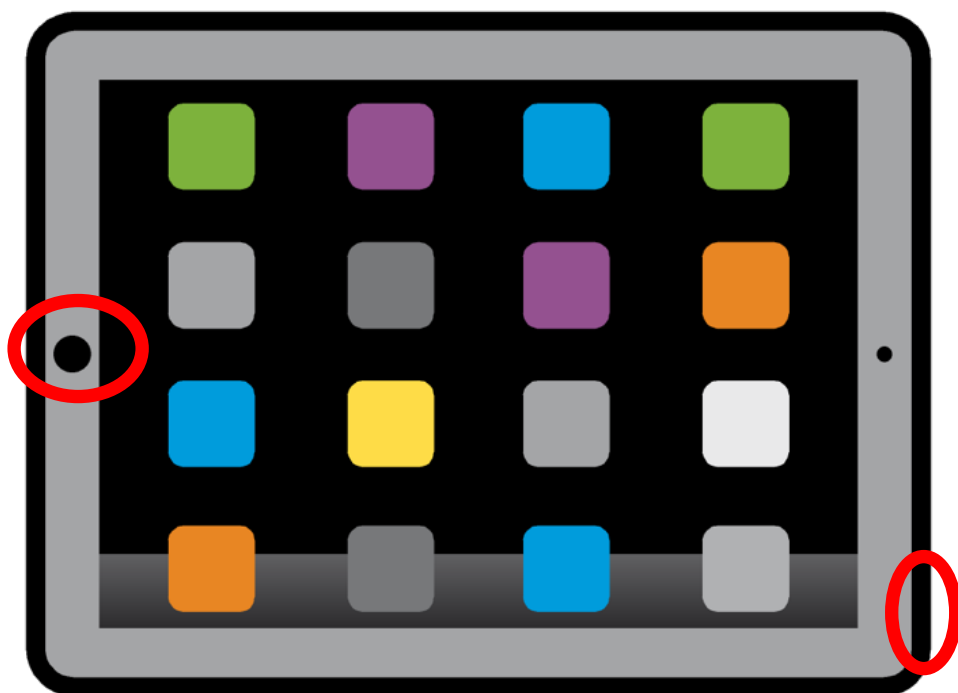
Time-limit: When time is over, the iPad is locked until the „Guided Access-Passcode“ is entered.



Tip: Screenshot

Press Home-Button and Standby at once.

**Home-
Button**



Standby

You will hear a camera's
noise and the screen
lightens shortly.

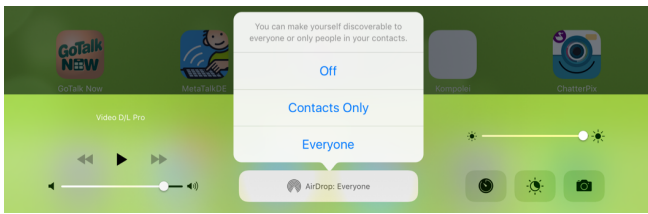
You will find the
screenshot in Photo
Library.





Tip: AirDrop

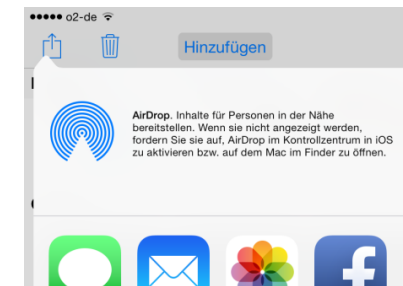
AirDrop is an ad-hoc service in Apple OS X and iOS operating systems. It enables the transfer of files among supported Macintosh computers and iOS devices without using mail or a mass storage device. It uses Bluetooth and WLAN direct.



1. Open Control Centre and choose „Everyone“ on both devices.



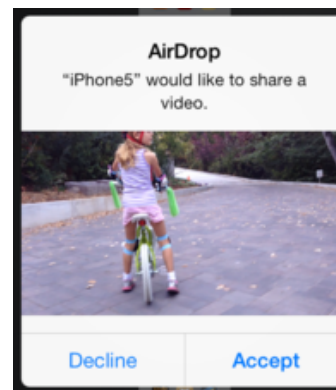
2. Tap on the export arrow to open the Export-Menu.



3. Several Export-features are available. Wait until the other iPad appears instead of the AirDrop-Icon.



4. Tap to share with AirDrop.



5. Accept the transfer on the receiving iPad.

6. iPad will open the data file will in the appropriate app or will ask if several apps are possible.

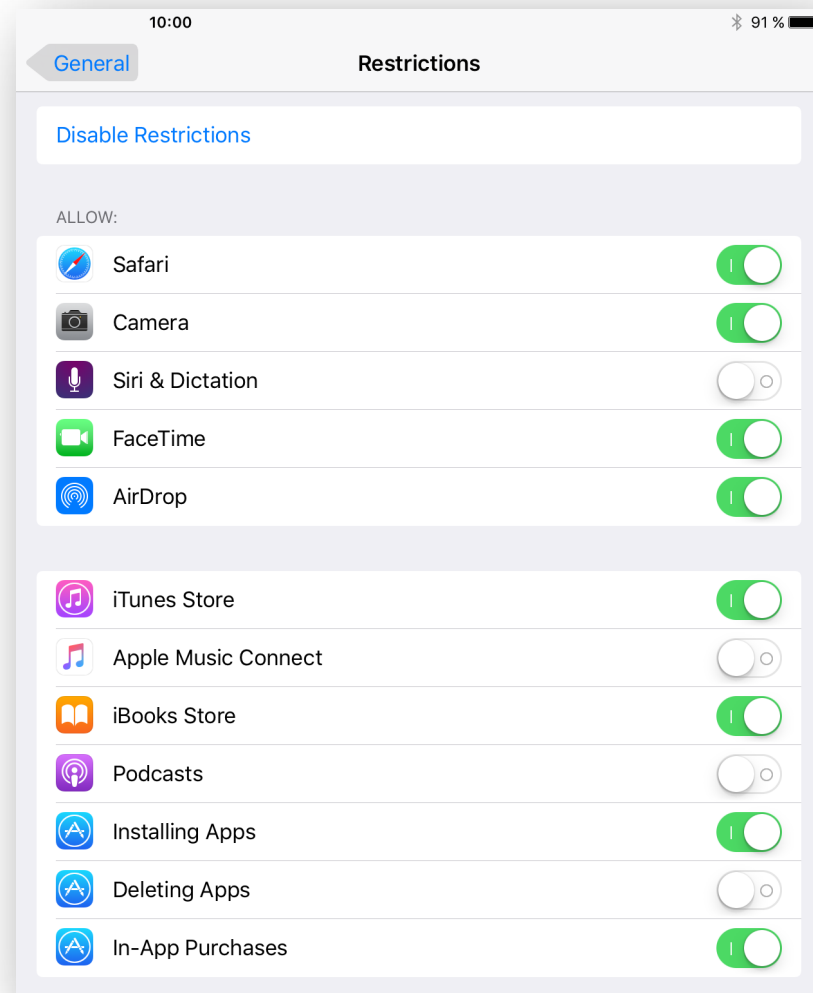


Tip: Restrictions

Child-proof-lock for important
iPad-settings.

To disable Restrictions
a passcode is necessary.

„Deleting Apps“ must be restricted:
In case of accidentally deleting an App,
the individualized content (like
communication books, ...) is lost
(if there is no backup in iTunes or iCloud...)





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AAC Apps for the iPad

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Unterstützte Kommunikation e.V.



AAC Apps - List by Jane Farrell

Gesellschaft für Unterstützte Kommunikation e.V.



**Jane Farrall
CONSULTING**
Literacy - AAC - Assistive Technology

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[Symbol / Picture Apps A – M \(Part 1\)](#)

[Symbol / Picture Apps N – Z \(Part 2\)](#)

[Symbol & Text Based Apps](#)

[Text Based Apps](#)

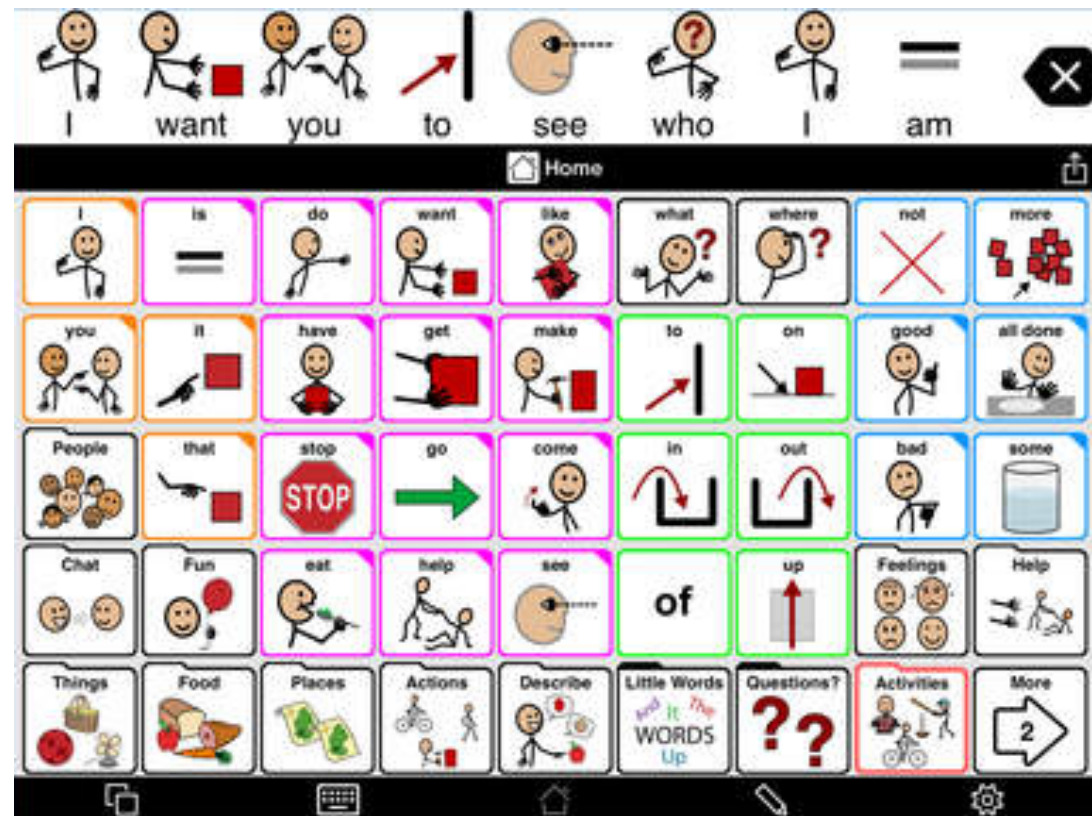


AAC Apps

Proloquo2go

Gesellschaft für Unterstützte Kommunikation e.V.

- symbol-based AAC App
- English (British, US, Australian) and Spanish (North-American, Castillian)
- 3 vocabulary levels and 23 grid sizes ranging from 9 to 144 buttons on the screen
- 20,000 SymbolStix symbols or photos
- scanning
- 249,00



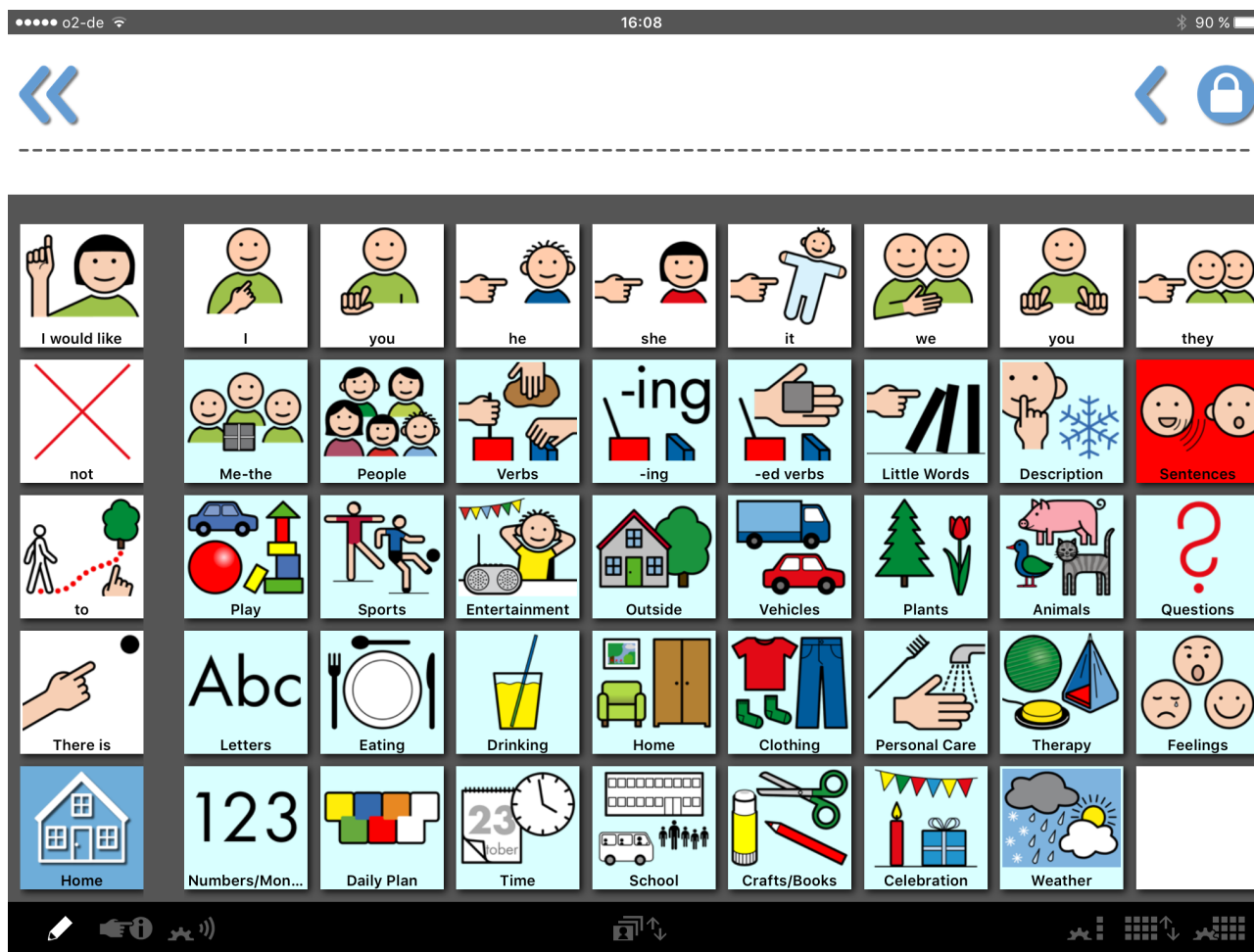


AAC Apps

MetaTalkUS

isaac
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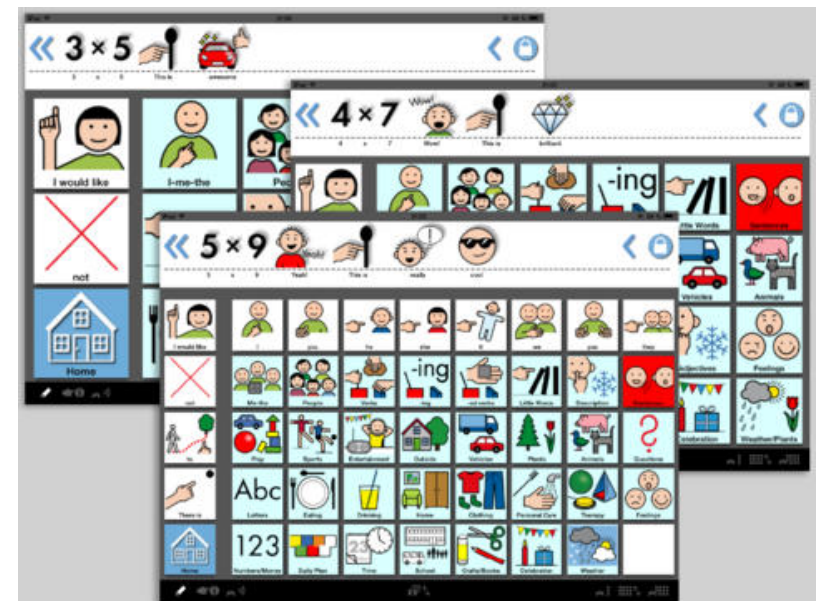




AAC Apps

MetaTalkUS

- MetaTalk is a symbol-based application for Augmentative and Alternative Communication (AAC). It allows users without or with limited voice capabilities to communicate. MetaTalk is preconfigured with three rich vocabularies - you can start immediately. Individual customizations are easy and always possible.
- MetaTalk is based on METACOM symbols which are known for their clarity and professional design. A simple structure allows beginners - and relatives without special AAC training - to learn and grow over time.
- Cedar Health Care LLC
- 179,99 €
- has to be improved
(version 1.5.1, last update 10/14)



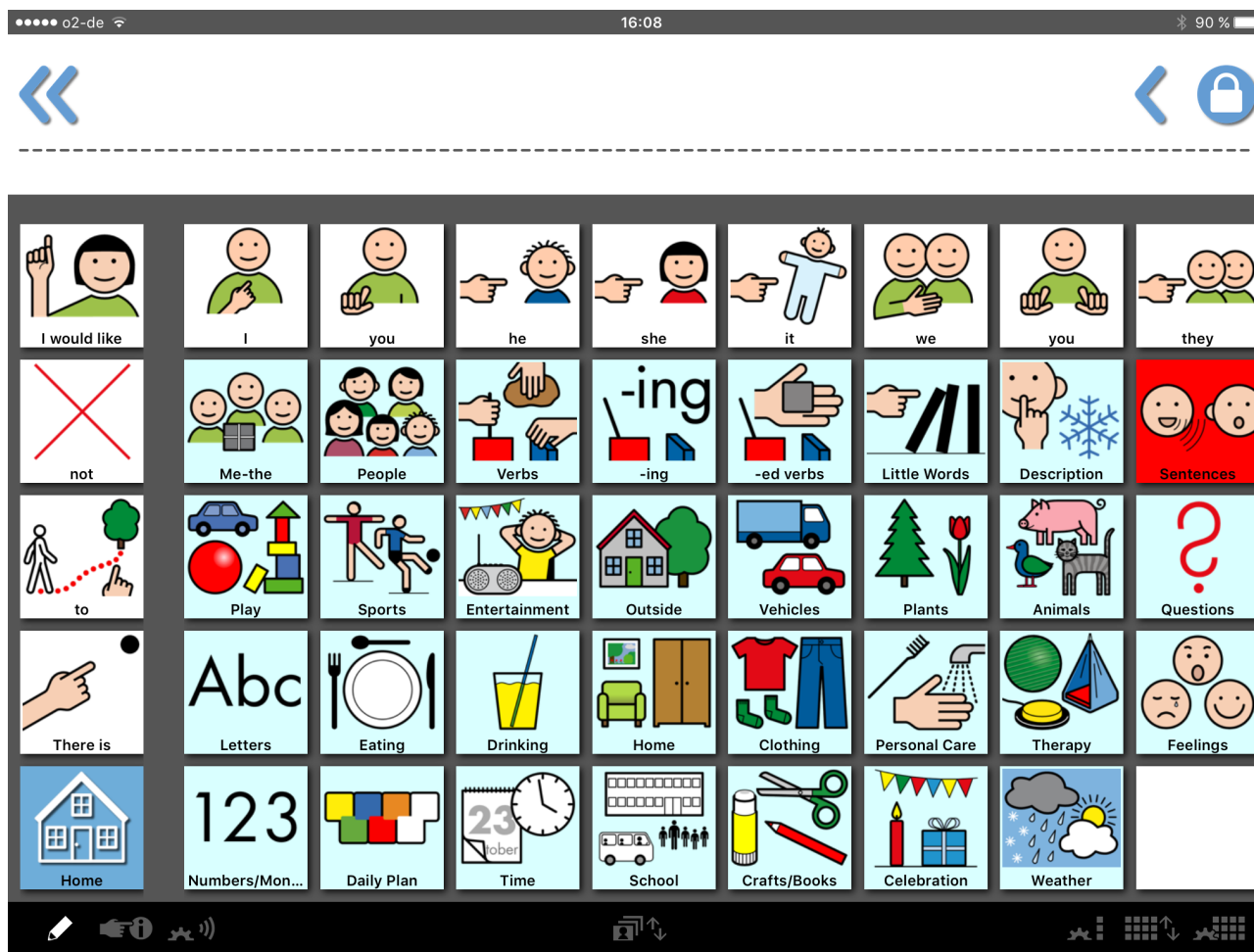


AAC Apps

MetaTalkDE and MetaTalkUS

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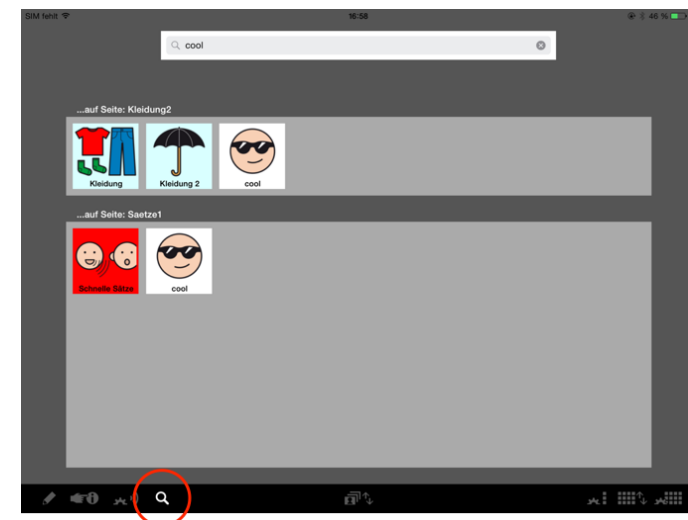
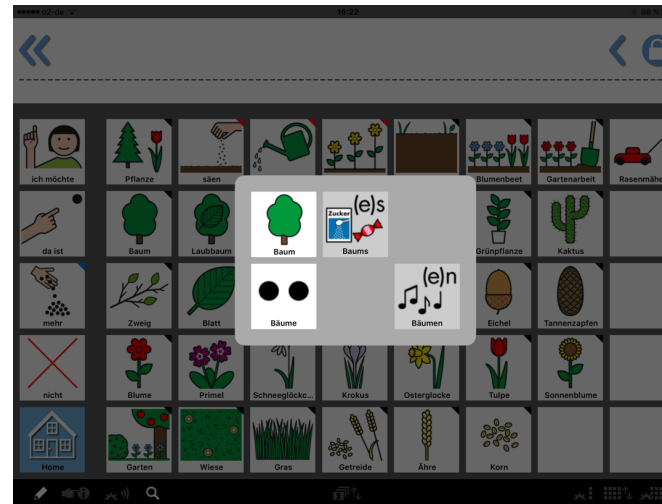




AAC Apps

MetaTalkDE

- German version of MetaTalk
- really popular
- Cedar Health Care LLC
- 199,99 €
- further developed than MTUS (version 2.0.1, last update 02/16)
 - grammatical popups
 - search function





AAC Apps

GoTalk Now

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- AAC-app for individual communication sets
- adjustable page layouts
- customizable navigation
- recorded and text-to-speech capabilities (with different voices)
- included and in-app symbol sets



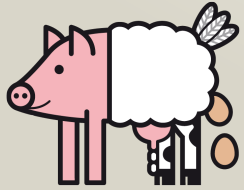


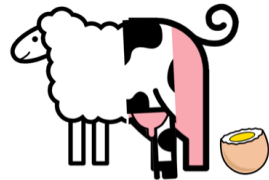
GoTalk Now at Summer School 2016



Gesellschaft für Unterstützte Kommunikation e.V.

- GoTalk Now is the most flexible AAC App with supporting photos, different symbol sets, videos, music...
- individual communication books or teaching materials are easy to create
- GoTalk Now supports 38 build-in iOS voices und 68 in-App voices for text-to-speech in more than 30 languages
- it is one of the cheapest AAC apps (80 €, GoTalk Start 20€, GoTalk Lite for free)



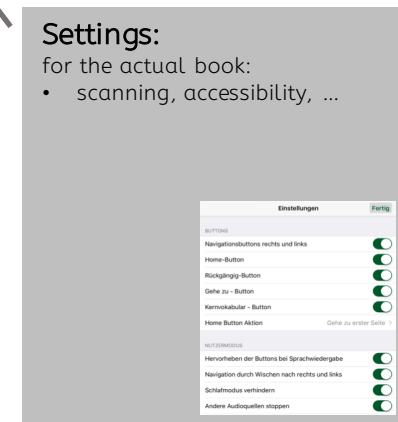
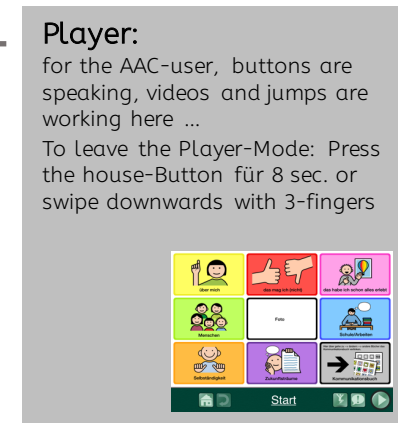
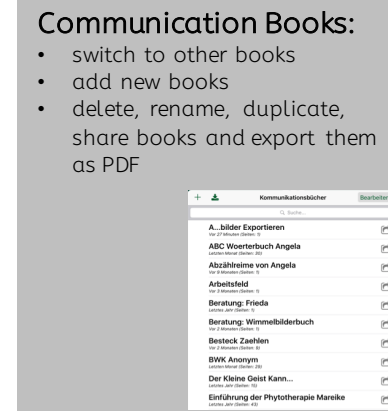
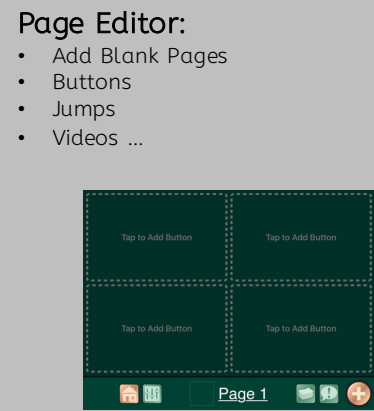
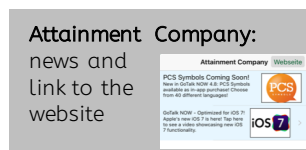
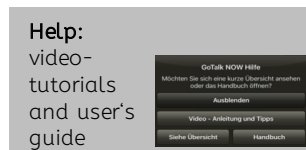
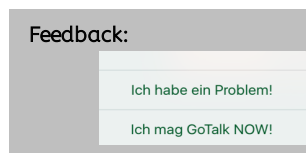
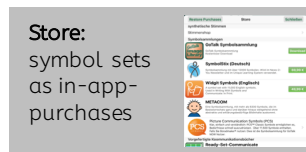
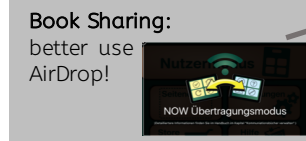
 Kommunikationsbuch	 Videos	 Erzählbuch	 Mediaplayer
 Kommunikationstafel		die	 Ich-Buch
 Präsentation	eierlegende Wollmilchsau		 Diagnostik mit Fred
 Quiz	 Sprachaufnahme	 URL einfügen	und bestimmt noch viel mehr...

**Eierlegende Wollmilchsau**



GoTalk Now Home Screen

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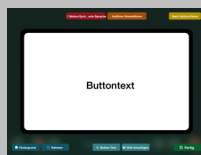


GoTalk Now Page Editor

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Tap to Add Button:

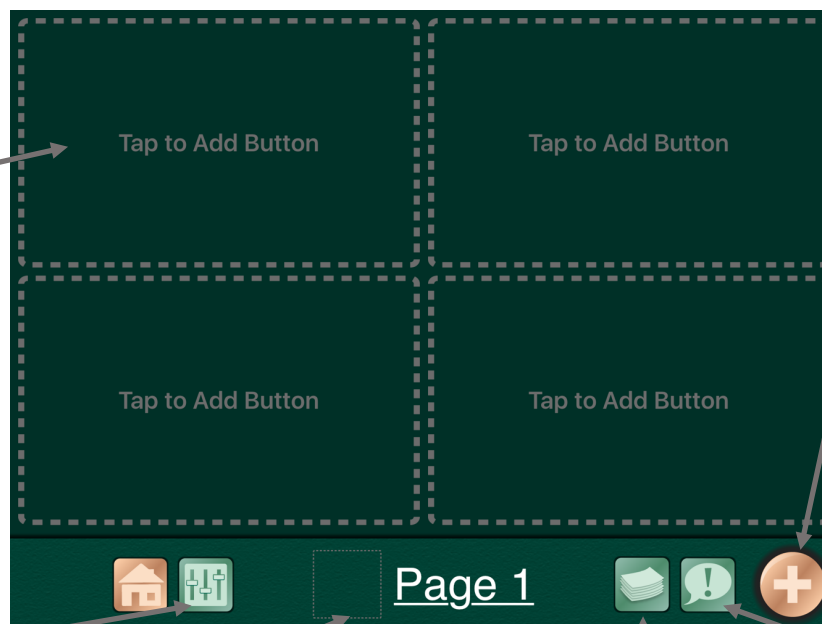
opens the Button-Editor.
Long keystroke to delete,
exchange and
copy buttons.



House:
back to Main Menu.



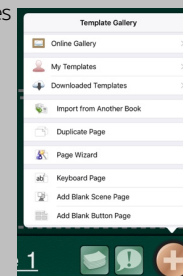
Arrows:
Turn the page.



Add new Pages:

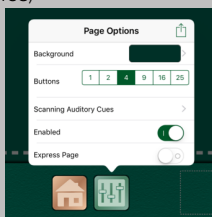
+Button only on the last page of
the book. Reach the Tapmlate
Gallery via Index of Pages and +
on each Page.

- Button pages
- scene pages
- keyboards
- duplicate
Pages
- download
books and
Templates
- use Page
Wizard



Page Options:

- Background
- number of Buttons
- Express Page (Buttons will be
added into a field on top of
the page and can be spoken
as a sentence)



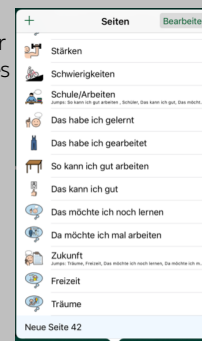
Page's Name:

- page's name
- Icon for the page
- auditory cue for the page



Index of pages:

- switch to other pages
- tap + to add new pages
- Edit:
exchange or
delete pages



Core vocabulary:

- four buttons which are
available from every page in
the book
- speaking buttons
or links f.e. to other
books



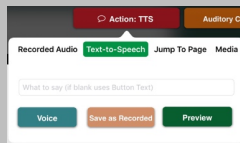


GoTalk Now Button Editor

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Action:

- recorded Audio
- Text-to-Speech (change and buy voices here)
- „Jump to Page“
- MediaPlayer: add Musik from iTunes
- open URL in Safari
- HUE lamps
- add Video from Library



Button Text

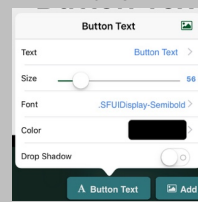
Background/Border:

- choose colors for Background and Borders of the Button.



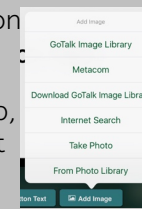
Button Text:

- Subtitle of the Button (will be read if you choose Text-to-Speech as Action)
- Size, Font and Color of Text
- duplicate Text as jpg to simulate a second Text



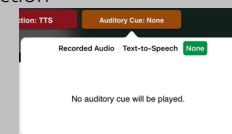
Add Image:

- Take photo
- Add from Photo Library
- Internet-Search
- Symbol set
- You may add multiple pictures
- double-tap on the image to delete, reset position, crop, bring to front and save to Camera Roll.



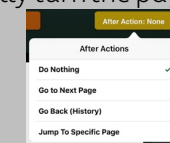
Auditory Cue:

if you add an auditory cue (as recorded Voice or TTS) the Player will hear this on 1. tap. On 2.tap „Action“ will start.



After Aktion:

After the choosed „Action“ is finished, the button can automatically turn the page.



Done:

Back to Page Editor:
Button will be saved.

Tip:
Tap beside pop-up to close it.

To leave Player mode:

- long press (8 sec) House-Button
- swipe downwards with 3 fingers



To leave Page-Editor

- tap House-Button





Exercise 1 – That's me!

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Add a foto and your name.



Take a video (using the iPad-camera-App) and add it as "Action". Add a screenshot of the video as image from Foto Library.



Tell us where you're from in your first language. Use recorded audio in "Action".



Use "+" to add a new "Blank Button Page" and "Page Options" to create 16 buttons. Use "Action" and "Jump to Page" on this blue button to link it to your new Page.



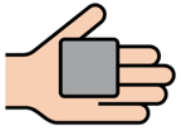
Exercise 1





Exercise 2 – International fast Communication

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 I would like to have something.	 I would like to do something.	 I would like to tell something.	 I've got a question.
 I am hungry.	 I am thirsty.	 I need help.	 Something is wrong.
 more	 Hello!	 Bye bye!	 not
 Yes	 again	 done	 No

Fast Communication