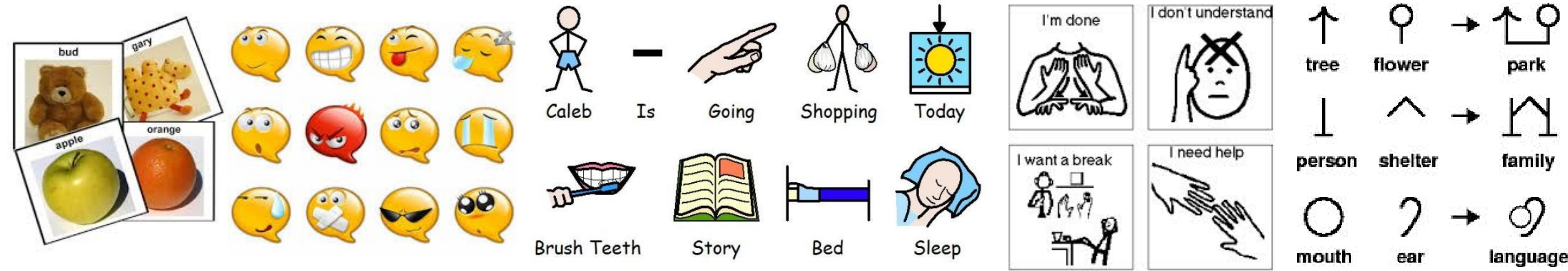


problems of understanding and clarity – Preliminary results

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Introduction

Symbol based communication needs a continuous reinforcement of understanding from the partner, therefore communication with people who are not familiar with AAC can be difficult.



Emoticons, photos, symbol systems are suitable for communication.



Communication applications on PC's, cell phones, tablets.

Participant

A 22 years old young man with CP and SCN: situation based understanding with emphasis on emotional components; has unclarified problems in speech perception without any hearing difficulties.



Communication with gestures and communication book with PCS.

Example slides from his ppt Cookbook made for younger peers

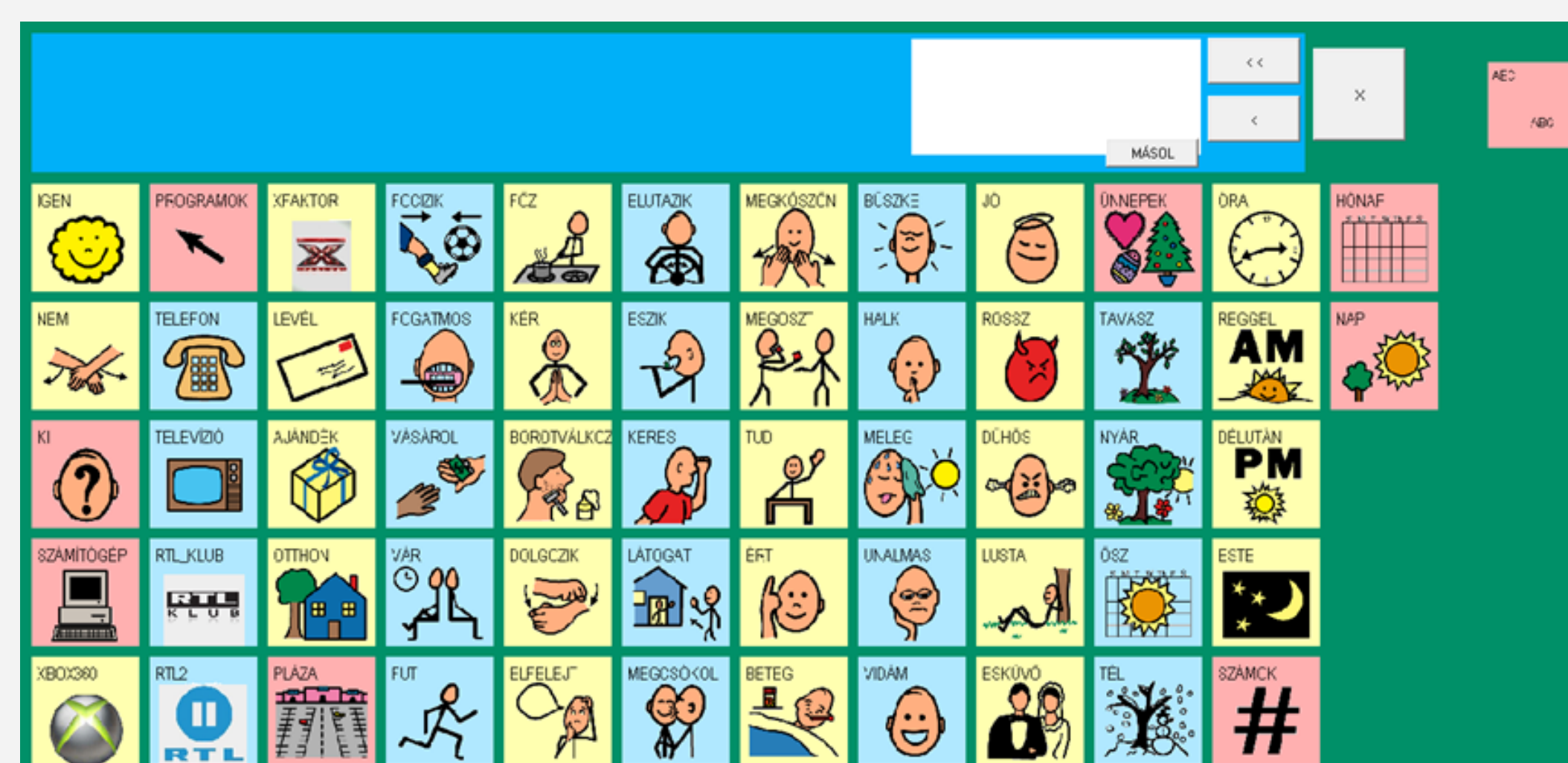
Use of visual channel is important for him.
Note the lack of text!

Numbers show the order of appearance; Green arrow shows the animation.



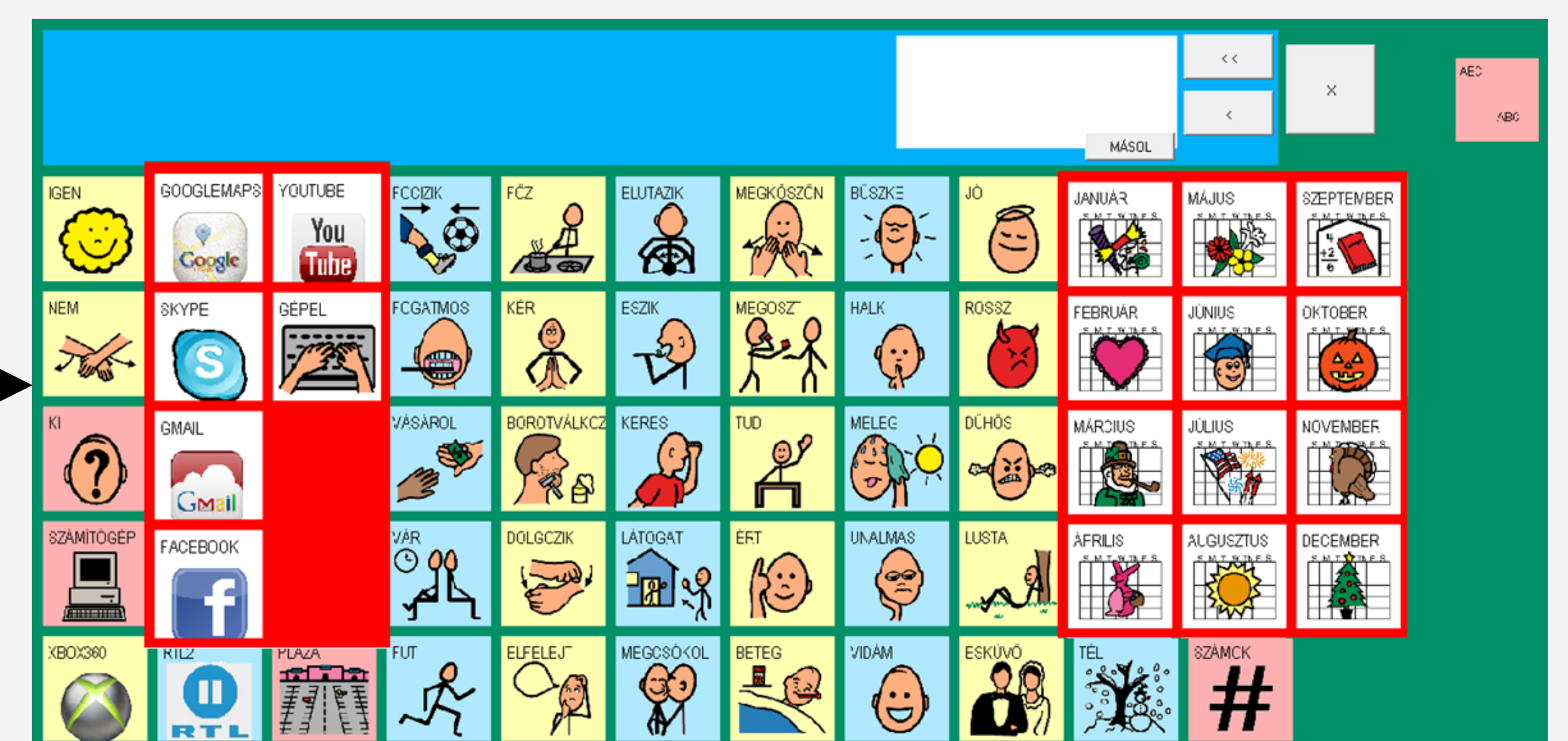
How to make tea

How to make banana smoothie



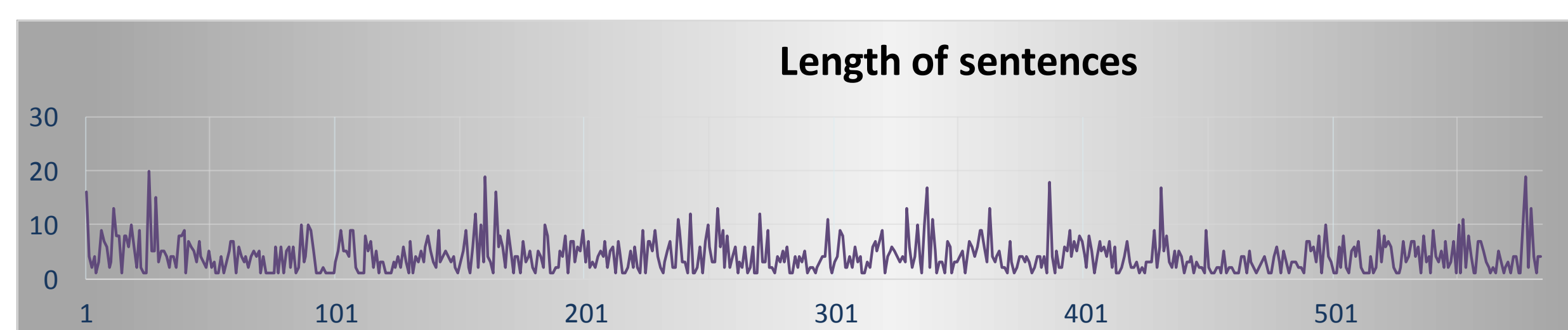
The main screen of the personalized communication software.

Pink parts denote drop down extensions that appear in red.

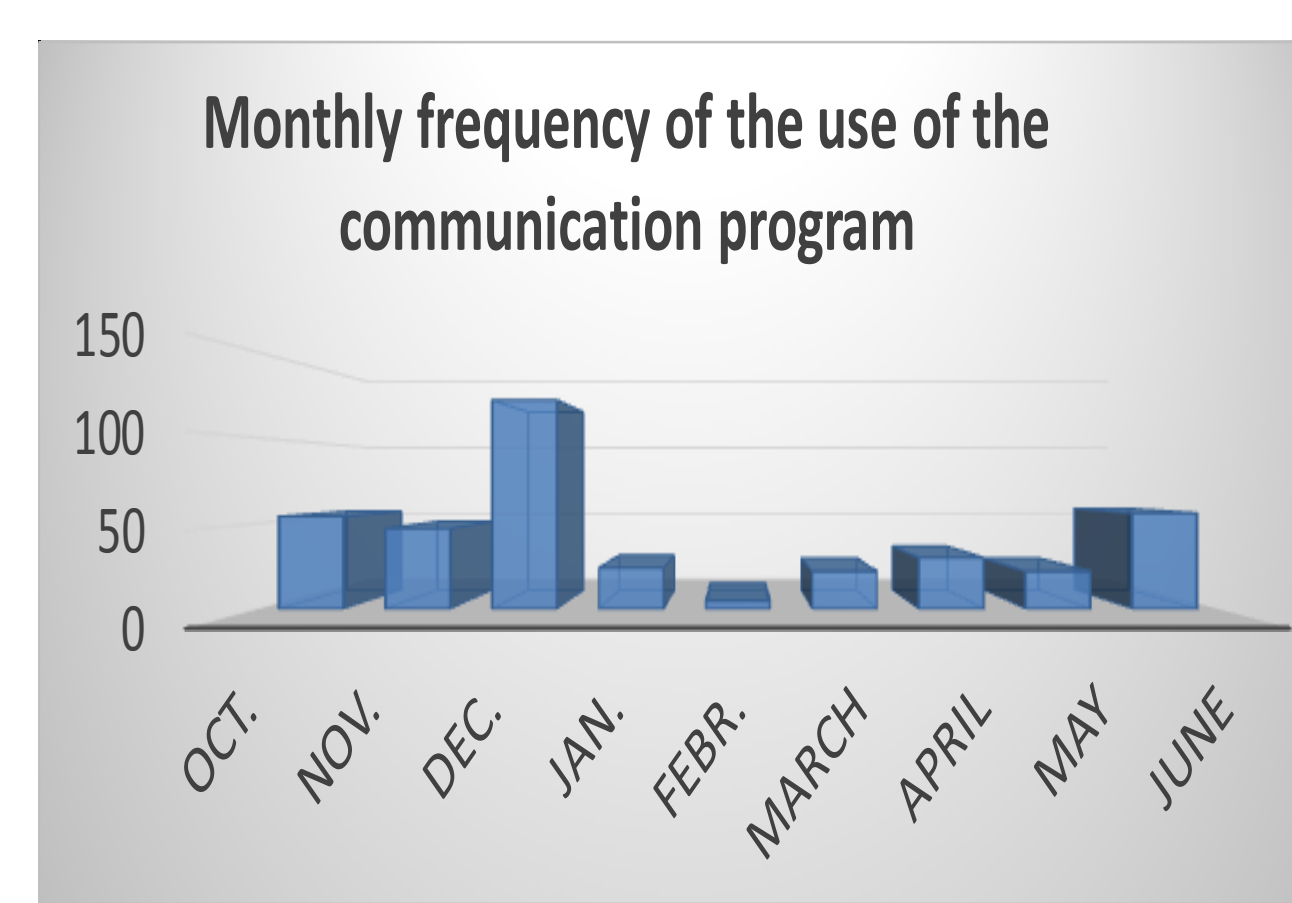


Results

In November 2012: he got the program.



Length of sentence depends only on complexity of communicational need.

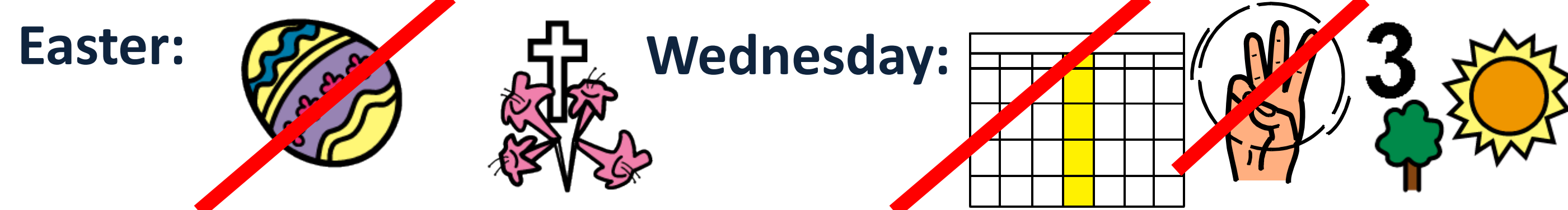


No trend in frequency of software usage.

Word	F.	S.	Word	F.	S.	Word	F.	S.
Daddy	163	19	Angry	37	8	Xbox	23	2
Mommy	41	6	Boring	15	0	DVD	18	0
Younger brother	34	2	Pólus cinema	8	3	Facebook	9	0

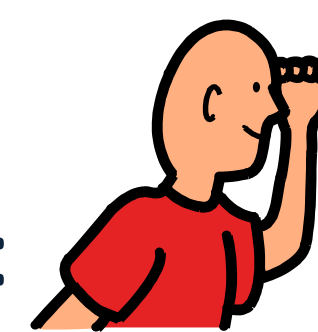
Most frequently used words and the longest sequence it was used in.

He is choosy but has poor vocabulary:



In case of more possibilities he accepted only a certain one.

“pay attention”,
„look”, “search”:



“walk”,
“run”, “go”:



“remember”,
“think”, “forget”:



For example: Did he meant to say **forgetting** or **thinking of** a present?



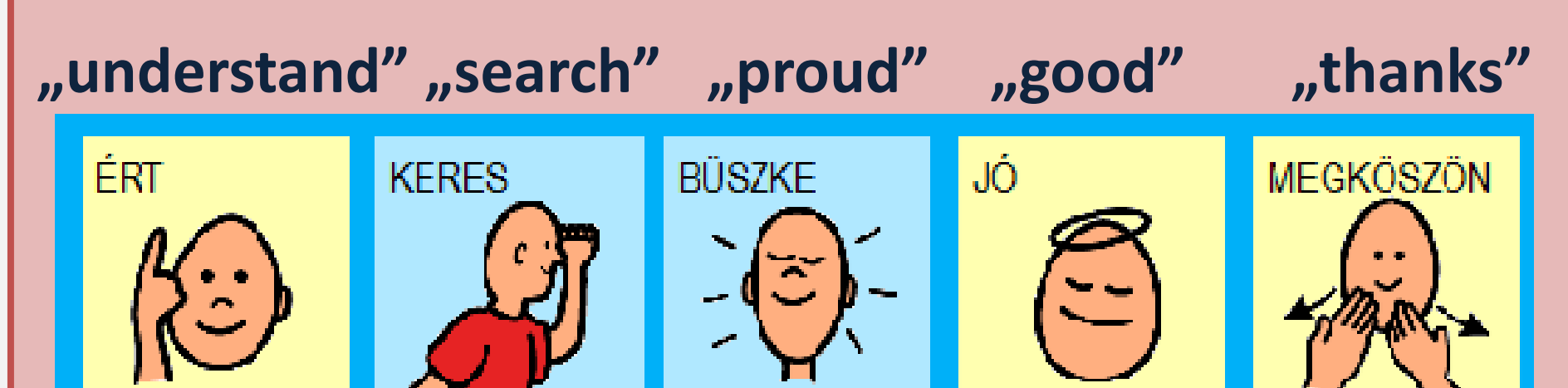
Discussion

The usability of the software is situation dependent. His gestures and picture communication methods lack grammar. It is hard to verify interpretations.

More documented communications and expanded vocabulary is needed!

Short animation based dialogue system is desired!

Part of a conversation:



„Understands me, pays attention to me. That makes me feel good and proud, for this I am thankful.”

References

- [1] Blackstone SW, Dowden P, Hunt Berg M, Soto G, Kingsbury E, Wrenn M, Liborin N., Augmented Communicators and their Communication Partners: A paradigm for successful outcomes, Conference Proceedings CSUN 2001.
- [2] M. Fried-Oken, C. Rowland, C. Gibbons. Providing Augmentative and Alternative Communication Treatment to Persons With Progressive Nonfluent Aphasia. In: Perspectives on Neurophysiology and Neurogenic Speech and Language Disorders. April 2010 vol. 20. <http://div2perspectives.asha.org/content/20/1/21.short>
- [3] J. L. Arnott, N. Alm. Towards the improvement of Augmentative and Alternative Communication through the modeling of conversation. Computer Speech and Language (2013). <http://dx.doi.org/10.1016/j.csl.2012.10.008>
- [4] K. Wiegand, R. Patel. Non-syntactic word prediction for AAC, Proceeding of SLPAT '12 Proceedings of the Third Workshop on Speech and Language Processing for Assistive Technologies, 2012, pp 28-36.
- [5] B. Miksztai-Réthey. Striving for independence through creating one's own communication board Two case studies; Proceeding of IX Western and Eastern European Conference on Alternative and Augmentative Communication (AAC), 2013, pp 116-121.

