

SignBank 2.0

Easy to Administer, Easy to Use, Easy to Share

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Presentation summary

- Signbank 2.0. Visual design and collaborative environment
- Users' Autonomy
- Administration panel with simple dashboard
- Robust search functions
- Interface between SignBank 2.0 and sign language corpus



Points of Departure

Global Signbank Cassidy et al., 2018; Crasborn et al., 2012, 2018

ID Glosses (Quadros, 2016; Quadros et al., 2020)

Search system (Scolari, 2022)

SignBank 2.0.

=> **Search functions** including handshapes, number of hands, handedness and location

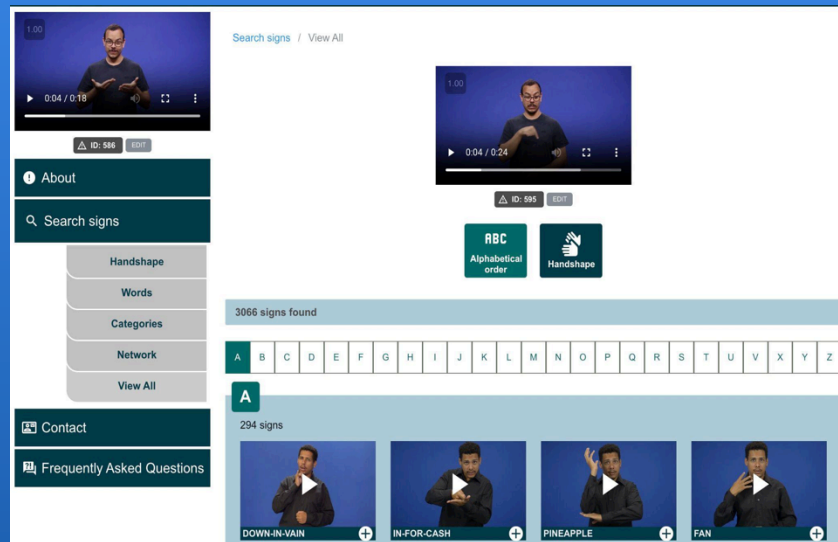
=> **Standard glosses** (for annotation)

Collaborative environment & visual design



Technology-mediated
collaborative environment and
Humanities 2.0 (Davidson, 2008)



Community of practice

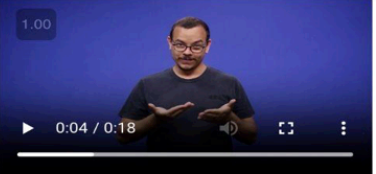
Participatory design
methodology: discussion,
prototype & validation
process (Camargo & Fazani, 2014)



Collaborative environment & Visual design





EN ▾



1.00
0:04 / 0:18

ID: 586 EDIT

 About

 Search signs


Handshape


Words

Categories

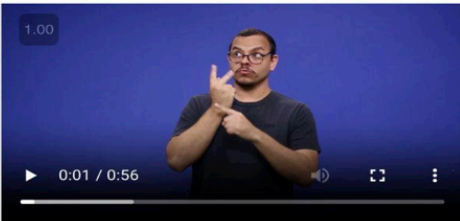
Network

View All

 Contact

 Frequently Asked Questions

Search signs / Categories



1.00
0:01 / 0:56

ID: 593 EDIT


Search by phonology ▾


Search by morphosyntax ▾


Search by semantics ▾


Search by complementary property ▾

Search


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Língua Brasileira de Sinais

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DE SANTA CATARINA

 CNPq

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DE SANTA CATARINA

HUMBOLDT-
UNIVERSITÄT
ZU BERLIN



Users' Autonomy

The screenshot shows the LIBRAS SignBank interface. On the left is a dark sidebar with navigation links: Overview, Users (highlighted), Signs, EAF, About, Contact, Frequently Asked Questions, Terms of Use, Privacy Policy, Website Settings, and Exit. The main content area is titled 'Users' and includes a video player showing a man signing, a search bar, and a table of users. The table lists 10 of 23 users, with columns for Creation Date, Name/Identity, Email, First Language, Approver, Status, and Profile Type. Two users are visible: an administrator and a deaf user named Vitor Edit.

LIBRAS SignBank

EN Ronice Quadr...

Dashboard / Users

Users

Type what you are looki...

ID: 514

List de usuários da plataforma
Lista of users and their status

EDIT

0:01 / 0:07

Displaying 10 of 23 users

ORDER BY SELECT

CREATION DATE	NAME/IDENTITY	EMAIL	FIRST LANGUAGE	APPROVER	STATUS	PROFILE TYPE
2020/07/16	Administrador Ger... hearing	admin@admin.com	Português	Yes	activated	Admin
2020/07/17	Vitor Edit Soare... deaf	vitohugosg@levan...	Libras	Yes	activated	Admin

- (i) Management
- (ii) Explanation through signed texts (editable)
- (iii) Dashboard

Users' Autonomy

Dashboard is accessible and editable (a)

<

Sign items

Semantic field

Handshape

Handedness

Handedness (searchable group)

Handshape ch

>

Sign items


























Displaying 15 of 3066 signs

Type what you are lo...

Q

ORDER BY

SELECT

CREATION DATE	SIGN	LEMMA (PT)	GLOSS ID (PT)	PUBLISHER	STATUS
2021/04/01		À-TOA	À-TOA	Published by Portal de Libras	<div> published</div> <div>  </div>
2021/04/01		À-VISTA	À-VISTA	Published by Portal de Libras	<div> published</div> <div>  </div>
2021/04/01		ABACAXI	ABACAXI	Published by Portal de Libras	<div> published</div> <div>  </div>
2021/04/01		ABANAR	ABANAR	Published by Portal de Libras	<div> published</div> <div>  </div>
2021/04/01		ABANDONAR	ABANDONAR	Published by Portal de Libras	<div> published</div> <div>  </div>

Users' Autonomy










Dashboard is accessible and editable (b)

The screenshot displays a web dashboard interface for a 'Semantic field'. At the top, a dark navigation bar contains several tabs: '< Sign items Semantic field Handshape Handedness Handedness (searchable group) Handshape ch >'. The 'Semantic field' tab is currently selected and highlighted in green. Below the navigation bar, the main content area has a title 'Semantic field' and a subtitle 'Displaying 10 of 85 fields'. To the right of the title is a search bar with the placeholder text 'Type what you are lo...' and a magnifying glass icon. Below the search bar is a filter dropdown menu labeled 'ORDER BY' with the word 'SELECT' and a downward arrow. The main content area features a table with three columns: 'CREATION DATE', 'COLOR', and 'NAME'. The table lists 10 items, each with a creation date of '2022/11/09', a color code, and a name. To the right of each row, there are two small icons: a blue circular arrow and a red square. At the bottom of the table, there is a pagination control with a series of buttons: '< 1 2 3 4 5 6 7 8 9 >'. The button '1' is currently selected and highlighted in black.

CREATION DATE	COLOR	NAME
2022/11/09	#0A0A0A9F	foods
2022/11/09	#863535FF	animals
2022/11/09	#CCB918F0	associations/foundations
2022/11/09	#0B0EA8F5	drinks
2022/11/09	#CCCCCFF	características
2022/11/09	#CCCCCFF	ciudades/bairros/estados translation not given
2022/11/09	#1497CCCF	colors
2022/11/09	#1C23CCFF	days of the week
2022/11/09	#C73CCFF	entertainment
2022/11/09	#0075E2A8	teaching/study

Users' Autonomy

Availability of the list of occurrences of each sign item


CREATION DATE	VIDEO	GLOSS ID	TIME	LANGUAGE
2024/04/19	 <div>FLN_GR_F17_entrevista_cam03 translation not given (Florianópolis - Santa Catarina) Ronice Müller de Quadros</div>	THANKS	00:00:07 - 00:00:07	en
2024/04/19	 <div>FLN_GR_F17_entrevista_cam03 translation not given (Florianópolis - Santa Catarina) Ronice Müller de Quadros</div>	116 OCCURRENCES:		
2024/04/19	 <div>FLN_GR_F17_entrevista_cam03 translation not given (Florianópolis - Santa Catarina) Ronice Müller de Quadros</div>	Search for:		
2024/04/19	 <div>FLN_GR_F17_entrevista_cam03 translation not given (Florianópolis - Santa Catarina) Ronice Müller de Quadros</div>	Identifier		
2024/04/19	 <div>FLN_GR_F17_entrevista_cam03 translation not given (Florianópolis - Santa Catarina) Ronice Müller de Quadros</div>	Language		
2024/04/19	 <div>FLN_GR_F17_entrevista_cam03 translation not given (Florianópolis - Santa Catarina) Ronice Müller de Quadros</div>	Displaying 10 of 116 occurrences		
2024/04/19	 <div>FLN_GR_F17_entrevista_cam03 translation not given (Florianópolis - Santa Catarina) Ronice Müller de Quadros</div>	<div>FLN_GR_F02_entrevista_cam03</div> <div>Author: Ana Regina e Souza Campello</div> <div>Responsible researcher: Ronice Müller de Quadros; Place: Florianópolis - Santa Catarina - Brasil</div> <div>Start: 00:05:08 End: 00:05:08</div> <div>ACEITAR</div> <div>Language: pt</div> <div>Identifier: Tier_key - 1</div> <div>VIEW VIDEO</div>		
2024/04/19	 <div>FLN_GR_F17_entrevista_cam03 translation not given (Florianópolis - Santa Catarina) Ronice Müller de Quadros</div>	<div>FLN_GR_F02_entrevista_cam03</div> <div>Author: Ana Regina e Souza Campello</div> <div>Responsible researcher: Ronice Müller de Quadros; Place: Florianópolis - Santa Catarina - Brasil</div> <div>Start: 00:19:56 End: 00:19:56</div> <div>ACEITAR</div> <div>Language: pt</div> <div>Identifier: Tier_key - 1</div> <div>VIEW VIDEO</div>		
2024/04/19	 <div>FLN_GR_F17_entrevista_cam03 translation not given (Florianópolis - Santa Catarina) Ronice Müller de Quadros</div>	SIGN-patricia	00:00:24 - 00:00:25	en


SignBank 2.0 => Corpus-based tool

Corpus-based and
linguistic information
of each lexical item





Translation (local
language & English)

ACCEPT

SIGN FRAMING


SIGN VIDEO


BASIC PROPERTIES
LEMMA: ACCEPT
GLOSS ID: ACCEPT
SIGN TRANSLATION (ENGLISH) : accept, take, receive, adaption
SIGN TRANSLATION (ENGLISH): accept, take, receive, adaption translation not given

PHONOLOGY
HANDSHAPE OF DOMINANT HAND:  Beak_open  Beak
HANDSHAPE OF NON-DOMINANT HAND:  Beak_open  Beak
HANDEDNESS: 2s
LOCATION (AREA): Neutral
REPEATED MOVEMENT: No
ALTERNATING MOVEMENT: No

MORPHOLOGY

SEMANTICS
SEMANTIC FIELD: action verb

ICONICITY

SYNTAX


POST AND NOTES

COMPLEMENT PROPERTIES
LEXICAL TYPE:
IS IT IN A DICTIONARY?: No
VARIATION:

SignBank 2.0: Users' Profiles and Roles

- Sign language users & researchers)
- Administrators
- Publishers
- Validators

Profile Published signs Approved signs Deleted signs



Administrador Geral

Status: active


Profile type: admin

Signs: 0 published 0 pending

Approver: Yes
Hearing status: hearing
First language: Português
Registration date: 16/07/2020

[SEE PRIVACY POLICY](#) [SEE TERMS OF USE](#)

Profile Published signs Approved signs Deleted signs



Mardônio Aguiar

Status: active


Profile type: publisher

Signs: 0 published 0 pending

Approver: Yes
Hearing status: deaf
First language: Libras
Registration date: 11/07/2022

[SEE PRIVACY POLICY](#) [SEE TERMS OF USE](#)

Profile Published signs



Vitória Nunes Nunes

Status: active

Profile type: publisher

Signs: 0 published 0 pending

Approver: No
Hearing status: deaf
First language: Libras
Registration date: 26/10/2022

[SEE PRIVACY POLICY](#) [SEE TERMS OF USE](#)

Interface between SignBank 2.0 and sign language corpus through EAF files

ACCEPT

SIGN FRAMING



BASIC PROPERTIES

LEMMA: ACEITAR

ENGLISH LEMMA: ACCEPT

GLOSS ID: ACEITAR

ENGLISH GLOSS ID: ACCEPT

SIGN TRANSLATION (PORTUGUESE) : aceitar

SIGN TRANSLATION (ENGLISH): to accept

116 OCCURRENCES:

Search for:

Identifier

Language

Displaying 10 of 116 occurrences

FLN_GR_F02_entrevista_cam03

Author: Ana Regina e Souza Campello

Responsible researcher: Ronice Müller de Quadros; Place: Florianópolis - Santa Catarina - Brasil

Start: 00:05:08 End: 00:05:08

ACEITAR

Language: pt

Identifier: Tier_key - 1

VIEW VIDEO

FLN_GR_F02_entrevista_cam03

Author: Ana Regina e Souza Campello

Responsible researcher: Ronice Müller de Quadros; Place: Florianópolis - Santa Catarina - Brasil

Start: 00:19:56 End: 00:19:56

ACEITAR

Language: pt

Identifier: Tier_key - 1

VIEW VIDEO



Robust searching tools (a) through lexical signs



Drag the images to choose the handshape



View all

Drag the images to choose the handshape



View all



About

Search signs

Handshape

Words

Categories

Network

View All



Robust searching tools (b) through words

Select the type of search

GENERAL SEARCH

START WITH

EXACT MATCH



A



ANNOUNCE



ACCEPT



ACTOR



ADD-LIST

Search signs / Categories / Search Result

Result Category Result

Applied search:

Clear search

BACK TO SEARCH PAGE

ANNOUNCE	AFTER	ALSO	BIENOS AÑOS	SINAL SERVE DE BASE
Gloss ID: ANNOUNCE	Gloss ID: AFTER	Gloss ID: ALSO	Gloss ID: BIENOS AÑOS	Gloss ID: SINAL SERVE DE BASE
Sign Translation: announce, announcement, statement, proclamation, declaration	Sign Translation: after, then, next, upcoming, later, thereafter	Sign Translation: also, same, also, like, similar	Sign Translation: many years	Sign Translation: SINAL SERVE DE BASE
Handshape of dominant hand: 1	Handshape of dominant hand: 1	Handshape of dominant hand: 1	Handshape of dominant hand: 1	Handshape of dominant hand: 1
Handedness: 2h	Handedness: 2h	Handedness: 2h	Handedness: 2h	Handedness: h
Location specific: neutral	Location specific: weak hand deictic indicator	Location specific: weak hand deictic indicator	Location specific: weak hand palma	Location specific: head (top or side)/chest
Movement shape: unformed data	Movement shape: unformed data	Movement shape: unformed data	Movement shape: unformed data	Movement shape: unformed data
Orientation change: unformed data	Orientation change: unformed data	Orientation change: unformed data	Orientation change: unformed data	Orientation change: unformed data
Relation between manual articulators: unformed data	Relation between manual articulators: unformed data	Relation between manual articulators: unformed data	Relation between manual articulators: unformed data	Relation between manual articulators: unformed data
Root morpheme: unformed data	Root morpheme: unformed data	Root morpheme: unformed data	Root morpheme: unformed data	Root morpheme: unformed data
Semantic field: action verb	Semantic field: unformed data	Semantic field: isomcity: unformed data	Semantic field: isomcity: unformed data	Semantic field: accessibility/community
Isomcity: unformed data	Isomcity: unformed data	Concept: unformed data	Concept: unformed data	Concept: unformed data
Concept: unformed data	Concept: unformed data	Word class: unformed data	Word class: unformed data	Word class: unformed data
Word class: unformed data	Word class: unformed data	Variation: unformed data	Variation: unformed data	Variation: unformed data

Robust searching tools (c) through linguistic properties





SignBank 2.0 => Open Source => Sign Languages

Brazilian SL

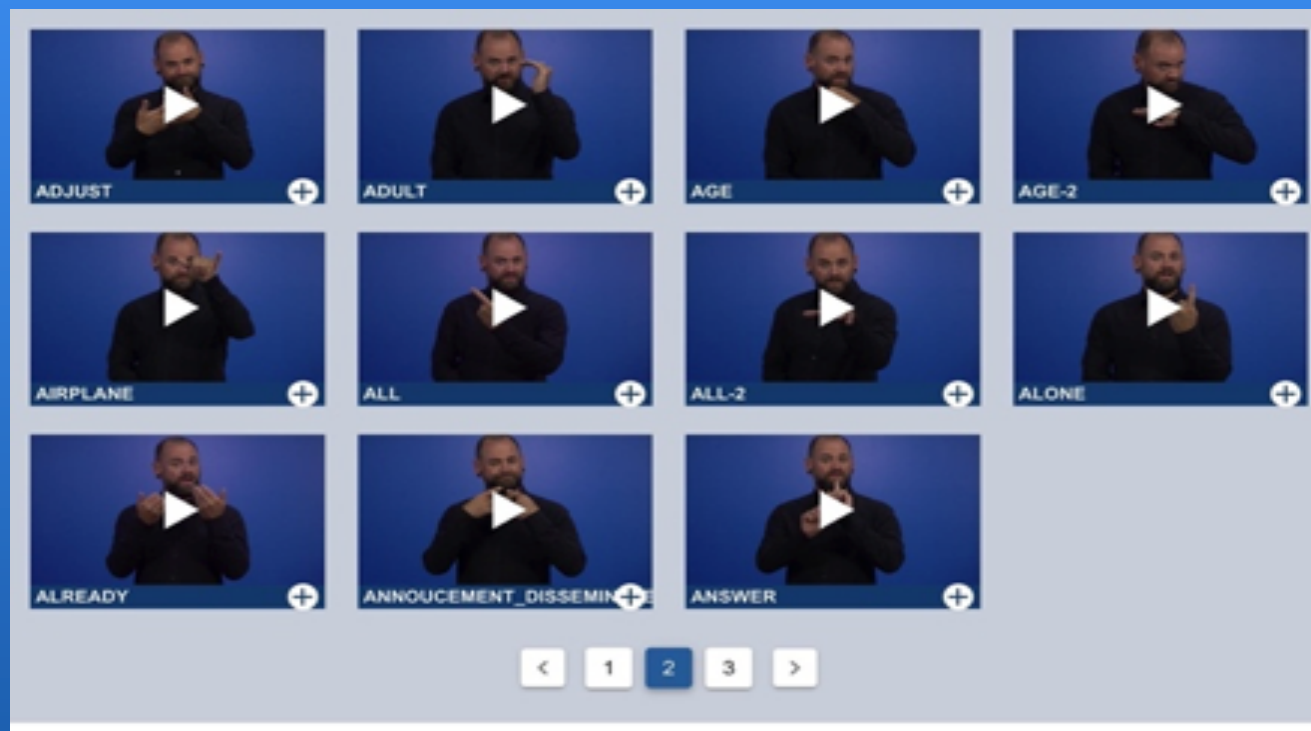
International SL

Hungarian SL

Estonian SL

Austrian SL

German SL



Signbank 2.0 Users' Evaluation



- Users / annotators with linguistic and without linguistic backgrounds

- Few steps



- Interface between SignBank 2.0 & SL corpus

- Use of EAF files


- Search function

- Verification process



- Manuals and explanations in SL and written (local) Ig
- Lexical items can be found via SL and written (local) language as well as English

Final considerations and discussion

- 
- **Underrepresented sign languages and access to technology / IT infrastructure;**
 - **Translation and creation of language-specific SignBanks 2.0**
 - **Deaf-centered /visually centered environment and research**
 - **Sustainability, Applicability and Open Access**

Final considerations and discussion



- Concept of Global Signbank used as a point of departure for the development of SignBank 2.0
- Developers use open access tools.

Final considerations and discussion



- PHP => backend application & JavaScript used for the frontend application
- MYSQL as database default
- REST standards used for communication between applications



SignBank 2.0

Easy to Administer, Easy do Use, Easy to Share

Thank you!



Levanti
LAB_