Instituto Politécnico do Porto

Instituto Superior de Engenharia

Departamento de Engenharia Informática

GILT – Games, Interaction and Learning Technologies

Communication challenges in inclusive education faced by deaf and non-deaf people

National Report – Portugal

Authors:

Nuno Escudeiro

Paula Escudeiro

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Abstract

Portuguese Sign Language and International Sign have very distinct status in the Portuguese deaf community. Portuguese Sign Language is wel established and recognized by law. International Sign is mostly unkown.

This report gives an overview of the current standing and the evolution of the system of education of deaf students in the country. We identify the most common challenges faced by deaf students in the classroom. We discuss the current situation relqted to Internationl Sign use and learning.

The report summarizes the main findings from the online survey and guided interviews conducted with experts in sign languages, deaf and non-deaf persons working in sign language teaching.

Contents

List of Abbreviations

LGP   **Portuguese Sign Language**

IS   **International Sign**

1. Introduction

In Portugal, around 150.000 individuals are deaf and/or suffer from some sort of hearing impairment. This has contributed to the growing interest in the Portuguese Sign Language use and learning not only within the deaf community but also within the Portuguese hearing community at large.

In 1997, the Portuguese Sign Language was recognized as deaf people's official language, and the 15th of November was set to be the National Day of the Portuguese Sign Language. The Portuguese Constitution, art. 74, no 2, h), legally states it must be protected and valued as part of the Portuguese culture and as a tool that enables access to education and to equal opportunities. It is covered by legislation from an equality perspective and deaf individuals are supported through their education process. Statistics suggest there is an under-representation of deaf students in the higher levels of the education system. Those who do engage perform similarly to hearing students.

Deaf children may engage in regular education institutions; however, it is more often for them to attend specific schools, being the deaf community an extremely close and reserved community. The number of Higher Education Institutions focusing degrees in the specifications of the Portuguese Sign Language has been increasing as well as specific research projects related to the area.

1.1.   Statistics

The 2014's survey has registered 10.325,5 people living in Portugal [1]; however, statistics are not precise concerning the number of deaf individuals. According to the National Survey On Disabilities and Disadvantages published by the National Institute for Rehabilitation, in 1996, there were around 115.066 hearing impaired and 19.172 deaf individuals. Later, in 2001, the Census registered 84.172 people suffering from hearing impairment. Ten years afterwards, the information regarding deaf individuals is even less precise: the number of people with some kind of disability or/and impairment is considered as a whole, being deafness merely pointed out as an example of one of the situations preventing people from carrying out some daily regular activities (such as hearing) [2]. Present data states there are around 150.000 deaf/hearing impaired individuals in Portugal [2]. Figure 1 shows the result of the research concerning people with any kind of disability gathered by the National Institute for Rehabilitation, in 1995. According to that study, 71,09% of the disabilities relate to hearing (Ouvir) [3] (Figure 1).
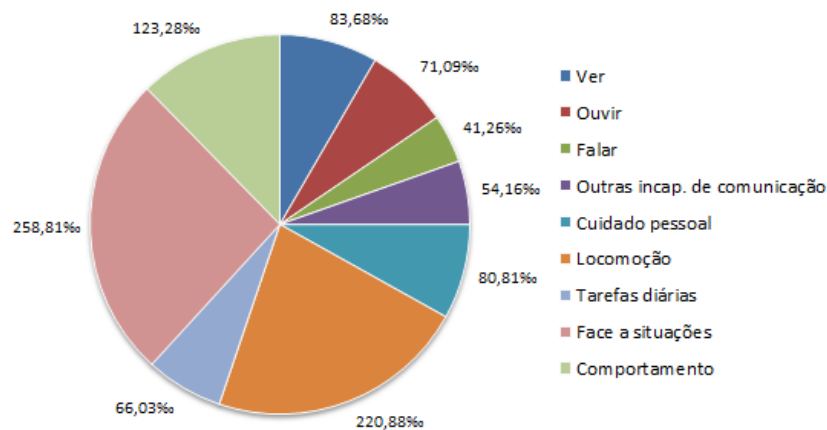
Figure 1. Distribution of people with some kind of disability and/or impairment according to the type of disability/impairment in 1995. Source: *[3]*.

As for the precise number of deaf in the education system, there is no official information, which clearly points to the need of a study in this area.

The research made in the Portuguese official statistics database did not return any specific information related to the number of qualified teachers of the Portuguese Sign Language as well. The data provided refers only to the number of teachers presently teaching in pre-school, basic and high school levels as may be observed in Figure 2.

Figure 2. Qualified teachers in practice in pre-school, basic and high school levels: total and by education level in the years 2001 until 2017. Source: DGEEC/Med – MCTES, PORDATA [1]

Nevertheless, according to Alexandra Perry, the President of AFOMOS (Portuguese Sign Language Teachers' Association), currently, there are about 88 teachers of Portuguese Sign Language teaching in the Portuguese schools both deaf students and hearing students who want to learn this language to communicate [4].
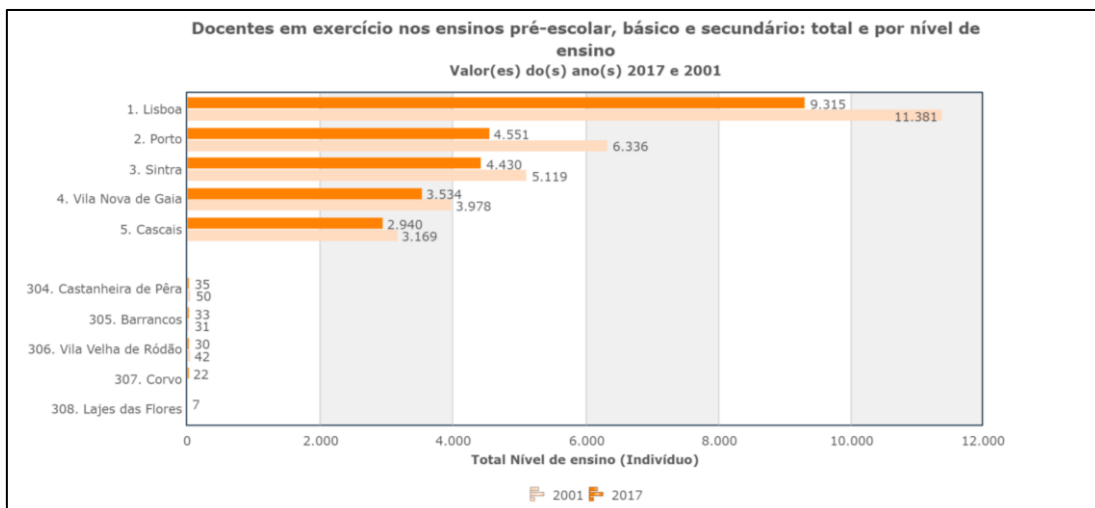
1.2.   Support System

The lack of (or insufficient) support given by the Portuguese public services is minimized by the Deaf Associations spread all over the country. It is in these associations under the umbrella of the Federação Portuguesa das Associações de Surdos (Portuguese Federation of the Deaf Associations) that most activities concerning the integration of the community take place [2]. There are Deaf Associations based in Leiria, Porto, Amadora, Algarve, Vale do Ave, Amadora, Águeda, Cascais, Almada and Lisboa [5]. The following list includes the most relevant associations and institutions related to the deaf community in Portugal.

Associação de Surdos no Porto

http://www.asurdosporto.org.pt

The Deaf Association in Porto website provides specific information related to the deaf community in Porto as well as relevant information for the hearing community, including legislation, news, training offers and cultural events.

AFOMOS – Associação de Professores de Língua Gestual Portuguesa

http://blogdafomos.blogspot.com/

Federação Portuguesa das Associações de Surdos

http://www.fpasurdos.pt

This website comprises the most complete and updated information about Deaf Associations, activities, education, and support; however, several of the links that should direct to specific information are not accessible.

PorSinal

http://www.porsinal.pt/

Website in Beta version that includes global information focused on news, projects, scientific research papers, films, literature and music involving deaf related areas.

The most relevant supporting systems in any field are institutions providing education in the specific areas. Concerning teachers' training in the Portuguese Sign Language related issues, there are several Higher Education Institutions both private and public that provide training and higher education degrees dedicated to the Portuguese Sign Language, besides the courses offered within deaf associations targeted at the hearing community.

The list that follows includes the most relevant institutions offering graduated degrees in this field of study.

COGNOS

https://www.cognos.pt/c_lgp_a1.html

Escola Superior de Educação – Instituto Politécnico de Coimbra

https://www.esec.pt/en/study/courses/portuguese-sign-language

Escola Superior de Educação do Instituto Politécnico do Porto

https://www.ese.ipp.pt/cursos/licenciatura/30001587

Faculdade de Ciências Médicas da Universidade Nova de Lisboa

http://www.unl.pt/guia/2017/fcm/UNLGI_getUC?uc=11170

Faculdade de Letras da Universidade de Coimbra

https://apps.uc.pt/courses/pt/course/4867

Faculdade de Psicologia e Ciências da Educação da Universidade do Porto

http://www.aefpceup.pt/formacao/curso-de-lingua-gestual/

Instituto Politécnico de Setúbal

http://www.ips.pt/ips_si/web_base.gera_pagina?P_pagina=30847

Instituto Superior de Ciências da Informação e da Administração

http://www.iscia.edu.pt/artigo/curso-de-especializa%C3%A7%C3%A3o-em-l%C3%ADngua-gestual-portuguesa

2. Portuguese Sign Language

The Portuguese Sign Language (LGP) was born from the Swedish sign language back in the 19th century. The Swedish Pär Aron Borg, founder of an institute for the education of the deaf in Sweden, was invited by the Portuguese King D. João VI to create a similar institute in Portugal. By 1823 the first Portuguese school for the education of the deaf was created. The alphabet of the two languages, Portuguese and Swedish sign languages, reveals their common origin .

The Portuguese Constitution recognizes that the Portuguese State is committed to "protecting and valuing the Portuguese sign language as a cultural expression and an instrument of access to education and equal opportunities " [2].

The National Day of the Portuguese Sign Language is celebrated on the 15th of November.

2.1.   Characteristics

The Portuguese Sign Language (LGP) has its origins back in 1823, by the initiative of Pär Aron Borg, a Swedish educator and pioneer in the education of deaf people. Despite this early start, the LGP was only legally recognized in 1997, being Portugal a pioneer in this field as by then only five other countries around the world had officially recognized sign languages.

The interest in the LGP has been growing over time, not only by the deaf community (nearly 150.000 individuals in Portugal from which around 60.000 use the LGP) [6], but also by the Portuguese hearing individuals. Sign Languages, like any other living language, are constantly evolving and becoming effective contact languages used in learning, leisure and work contexts [7].

The Sign Language is produced in a 3-dimensional space involving several features and inputs including hands movement, hands location, orientation and configuration and facial and body expression [8]. Similar to oral and written languages, sign languages also have a lexical, a phonetic, a phonology, a syntax, a semantic and a pragmatic of their own. Sign languages are, therefore, characteristic of each country and culture [9], and are not limited to the simple technique of a sign – they involve all the communication dynamics characteristic of human beings. Hands movement and gesture configuration are essential together with facial expression and body movement, being these fundamental to distinguish the meaning conveyed by hand movements.

The Sign Language is a movement and space language that obeys to specific parametres. As for the LGP the involved parametres are as follows:

- Hand/s configuration
- Articulation point (or place)
- Orientation
- Movement (straight, to the top, down, circular)
- Non-hand components (facial expression, body movement)

Hand/s configuration

The hand or hands may be used for multiple configurations in the LGP. The non-dominant hand may assume the articulation role in signs that need both hands to be performed. There is a specific hand configuration for each character in the alphabet, for numbers, special characters and terms.

What follows is a set of images where the hand configuration reveals the several signs in the Portuguese Sign Language from the alphabet to numbers and special signs. Figure 3 shows the hand configuration of the Portuguese Sign Language alphabet. Figure 4 presents the numbers in LGP, Figure 5 includes special signs in LGP, and finally, Figure 6 shows the configuration of the Greek alphabet.
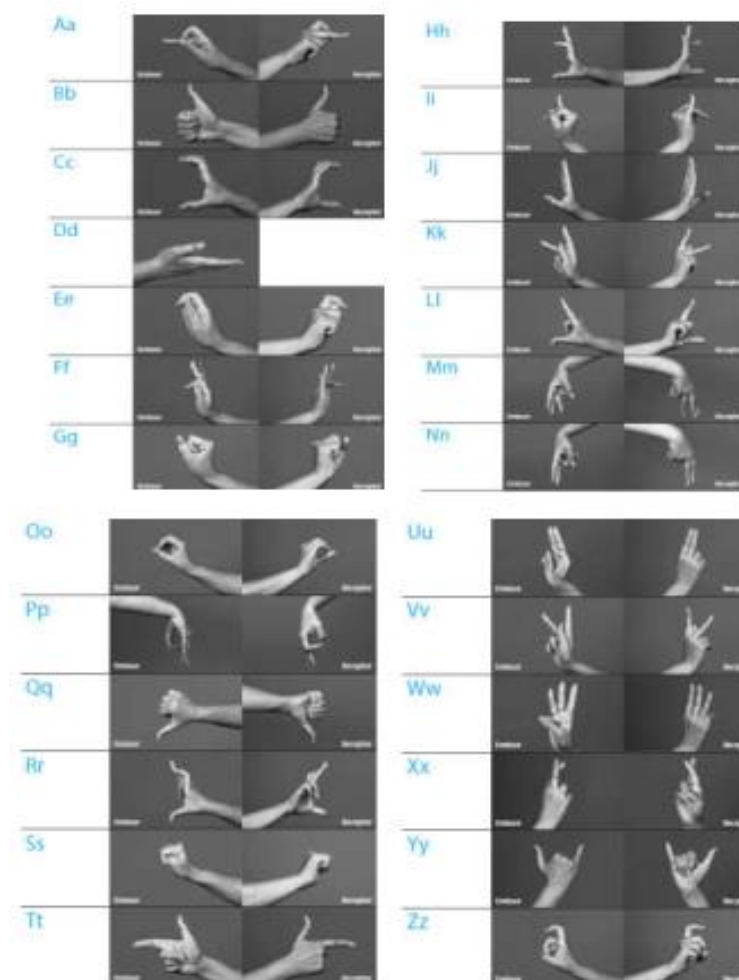

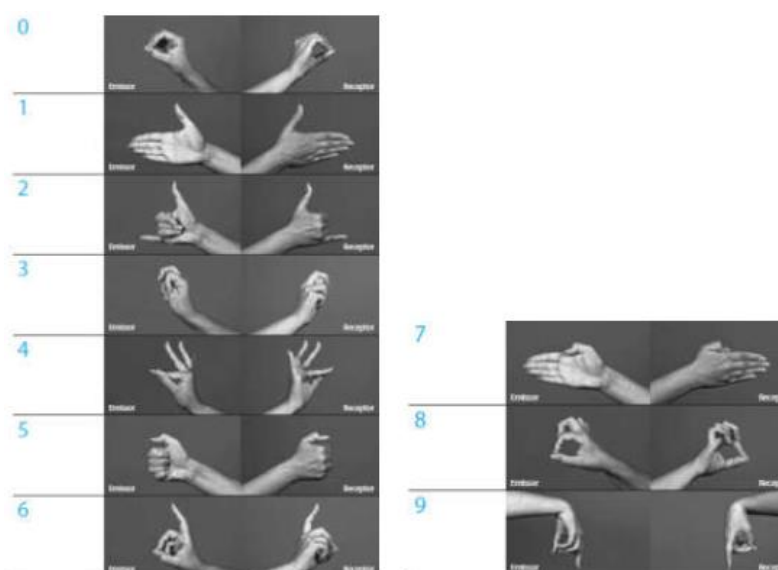Figure 3. Hand configuration of the LGP alphabet.

Figure 4. The numbers in LGP
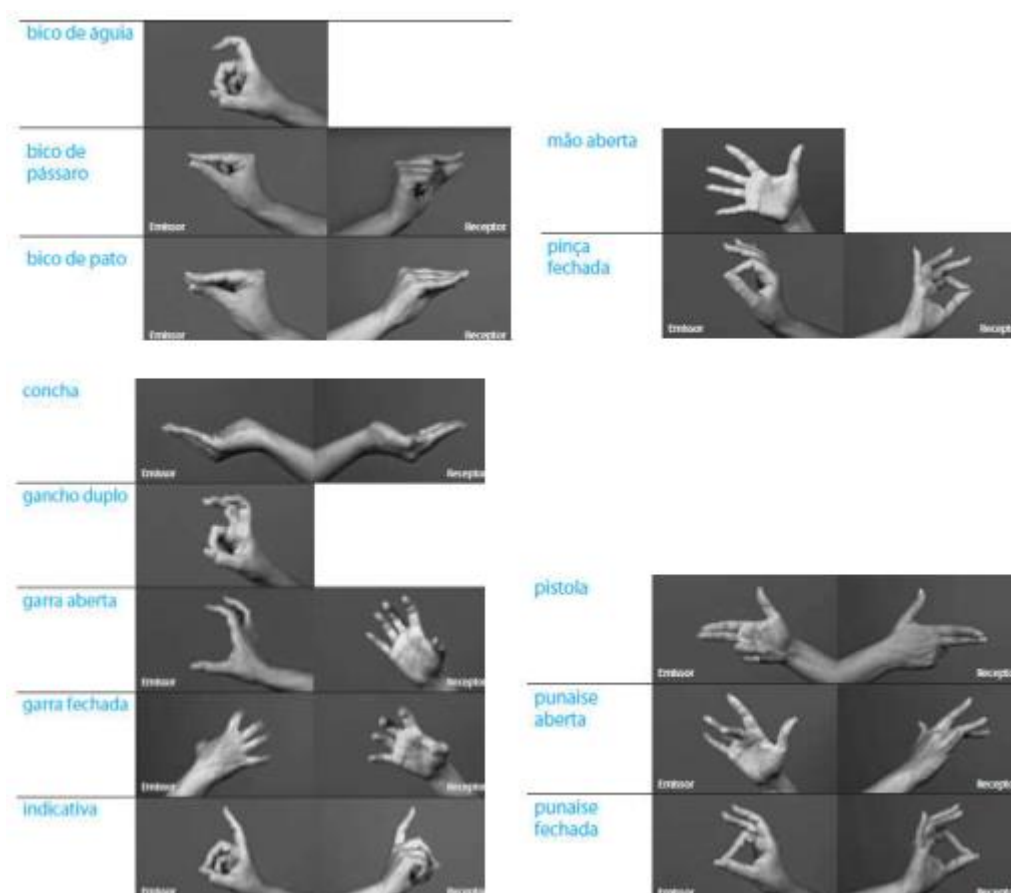
Figure 5. Special signs in LGP

Figure 6. Configuration of the Greek alphabet

Articulation point (place):

There are three main articulation points in LGP:

- Space within the several parts of the human body
- Space closer or farther to the body
- Articulation point of the dominant hand

Hand Orientation and Facial and Body Expression

The hand orientation is crutial in the LGP both in providing lexical contrast and in the morphological behaviour. A parallel relevance play all the non-hand movements, which include facial expression and body movement.

All body movements from its position to the facial expression, head and mouth movements, as well as the minimal vocal sounds accompanying some gestures may have diverse functions: morphological, syntactic, lexical, semantic and prosodic. Besides, they may also be perceived as phonological elements.

Summing up, there are six essential rules to be taken into account in the LGP:

- The gesture framework;
- The dominant hand and the non-dominant hand;
- The sender's and the recipient's perspectives;
- The facial expression;
- The body movement;
- Eye contact.

2.2.   Policies and Legal Status

The Portuguese Sign Language was recognized as deaf people's official language in 1997, being the 15th of November the assigned day to celebrate the National Day of the Portuguese Sign Language.

Article 74, 1., of the Portuguese Constitution starts by stating that "Everybody has the right to education, guaranteed rights to equal opportunities of access and success in the education path" [10], being a duty of the Portuguese State, as legally stated in Art. 74, no 2, h), to protect LGP and valued it not only as part of the Portuguese culture but also as a tool that enables access to education and to equal opportunities . This inclusion and recognition in the Portuguese Constitution occurred in 1997. A year later, Ruling no. 7520/98, from May 6th, pointed out the relevance of the education for the deaf to take place in "bilingual environments, favouring learning the Portuguese Sign Language as well as the written Portuguese Language, and eventually the spoken Portuguese" [10]. Moreover, in the same Ruling, the importance for a deaf child to be integrated in a socializing group integrated by other deaf children and adults it is recognized. Only by having immediate and direct contact with other deaf individuals will it be possible for a child to naturally acquire and develop the required means to communicate, and learn how to improve [11], [12].

Inferring from the referred to documents, the Portuguese Sign Language is covered by legislation from an equality perspective, and deaf individuals are supported (although not always with appropriate infrastructures) through their education process.

2.3.   Learning

The Portuguese Sign Language (LGP) is a visual-motor language, the production of which takes place through gestures and facial and body expressions, and whose perception is realized through vision. This language is used by Portuguese deaf people in their communication, being a brand important part of deaf identity. It is the most unifying element in the deaf community as a means of transmitting values and the cultural heritage of deaf people.

In Portugal deaf children attend bilingual education, LGP and Portuguese, since the second half of the 1980s. Bilingual education intends to make deaf students fully competent in both languages: their natural language and the official language of the country.

The LGP curriculum maintains some parallelism with the curricular guidelines for pre-school education, the national curriculum of primary education and the specific curricular organization for each of the three cycles in elementary school, in particular Portuguese as a mother tongue and History.

This LGP curriculum as a first language cannot be confused with a curriculum of LGP as a second language to teach non-deaf learners. Teaching a language that is acquired naturally during childhood is totally different from teaching a second language to whom has never had contact with it.

The curricular program for the Portuguese Sign Language course is intended to be a regulatory instrument for its acquisition and development as the first language of the deaf community. It considers four nuclear areas: Interaction in LGP, Literacy in LGP, Study of Language, LGP and Community and Culture.

Interaction in LGP: To express thoughts and feelings fluently, according to the visual communication rules and adjusting production to context and the interlocutor; understand easily spelled out formal and informal LGP. This area includes, in particular, competencies at the level of visual attention, understanding (these two essentially up to the second cycle), interpersonal and group communication, production, including intentionality, of diversity communicative and formal presentations (the latter mainly from the second cycle).

Literacy in LGP: Understanding, producing and analyzing different types of speech in LGP, take pleasure in the use of language as entertainment and art, be critical and creative, understanding experiences, interpreting meanings. Literacy specifically encompasses general understanding and understanding of narratives in particular, linguistic games, literary analysis, including the narrative analysis, production, humor, poetry, dramatization, language functions and the use of resources.

Study of Language: To know and analyze the grammatical aspects of the LGP and its socio-cultural variations, study the origin of gestures and their evolution. This component covers the formation of gestures, the units minimum values (gesture parameters), gesture classes, fields semantics (developed from the first cycle), vocabulary, the sentence structure, the linguistic correction, the variation of the LGP, the comparison between sign languages, the gestural alphabet and dactylology and the comparison with Portuguese.

LGP, Community and Culture: To know the different cultural and historical aspects that define the deaf community, by its direct or indirect involvement, indirect effect on the lives of deaf people over time, and develop a positive identity and self-concept. The Community and Culture includes aspects related to the identification, identity and pride, appreciation of the LGP, diversity, the national community and international, history, technologies, multiculturalism and citizenship.

The four core areas themselves have specific competences which, however, intertwine with each other and are an essential condition for understanding each other. None of them makes sense in isolation and the skills to be achieved in each one of the areas is necessarily dependent on the others.

The curricular program for the Portuguese Sign Language course is intended for all Deaf children, regardless of the type and degree of deafness, the age at which acquire (whether at an earlier, simultaneous or subsequent stage of language acquisition) and potential for audio-oral rehabilitation.

Thus, the curricular program must adapt to all Deaf children, taking into account their heterogeneity, both in relation to the age of access to bilingual education, and to the set of communicative skills with which they access it.

At its **first year**, the LGP curriculum addresses several competencies at each of its core areas

Interaction in LGP

- Understand the importance of looking at the deaf person;
- Understand and follow instructions;
- Discover and familiarize yourself with LGP conversation rules;
- Learn the rules for taking a turn in a conversation;
- Use LGP actively in different types of games and playful situations;
- Wait your turn and take the floor in large groups;
- Participate in class or larger meetings in an orderly manner;
- Express your will through the LGP;
- Realize the difference between your sign language and that of older students.

Literacy in LGP

- Understand original LGP statements;

- See different types of gestural statements, including true or fictionalized stories boys and girls his age, with deaf people and listeners;
- Vision statements presented by different Deaf people;
- Visioning fairy tales, fables and fanciful narratives and using fantasy elements in their own narratives;
- Watch someone tell stories often and try to create short narratives;
- Identify actors, characters and actions (in short stories, etc.);
- See and tell stories in LGP, interacting with the group in the discussions of the stories;
- Describe drawings and paintings (made by the student), photographs, places visited;
- Realize the aesthetic value of gesture combinations in linguistic games;
- Discuss and dramatize experiences lived outside the classroom;
- Dramatize stories;
- Understand the language as a means of communication;
- Know several stories in visual support, illustrated and narrated in LGP.

Study of Language

- Recognize in the gestures with both hands, the symmetry of the movements;
- Discover different LGP configurations in a playful way;
- Discover how a gesture is made up of manual and non - manual elements;
- Play with the movement of gestures and facial expression;
- Discover the fundamental elements of LGP in a playful way;
- Explore the use of adjectives;
- Use appropriate verbal forms and gestures to express the present, the past and the future;
- Describe drawings and paintings (made by the student), photographs, places visited, using facial expression and appropriate classifiers;
- Recognize the importance of location to convey meaning;
- Discover the numerals in LGP in a playful way and learn the different ways of indicating the numbers (eg: hours, days, weeks, months, age);
- Learn gestures about chronological time;
- Knowing how to use negation;
- Practice the use of different facial / body expressions in interrogative and exclamatory phrases;
- Practice the reception and production of the sign alphabet;
- Discover similarities and differences between the configurations of the gestural alphabet and the written form of the letters;
- Spell your name correctly, the name of familiar people and small words of your knowledge in typing.
- Discover that LGP and LP are different languages, but that you can translate from one to the other.

LGP, Community and Culture

- Work on themes that develop your personal identity;
- Accepting yourself as a deaf child, valuing your potential;
- Dramatize and explore the differences between mime and LGP;
- Develop pride in your language and willingness to develop your language skills;
- Analyze their language and compare it with that of Deaf adults;
- Understand the relationship between the family and the school;
- Discover nearby places where Deaf people come together (preferably Associations of the Deaf);
- Identify the oldest deaf professionals in your school;
- Discover colleagues and / or deaf professionals from Deaf families at your school;
- Recognize the usefulness of lighting equipment at school;
- Discover Deaf and hearing people in and around school;
- Knowing how to be in a group, respecting each other's space.

This summary was based on a report by the Portuguese Ministry of Education, Directorate-General of Innovation and Curricular Development, describing the curricular programme for learning LGP [13].

3. International Sign in Portugal

International Sign in rarely used, almost exclusively in academic environments. The deaf community does not use International Sign on a daily basis. The significant majority of Portuguese Sign Language (LGP) interpreters do not master or use International Sign.

3.1.   Policies and Legal Status

In Portugal there are no specific policies, laws or rules regulating the teaching/learning or use of International Sign.

3.2.   Learning

The School of Education of the Polytechnic of Coimbra offers a course on International Sign[1] - International Sign System - to its students. The course requires that the candidates have had previous approval on a course of Portuguese Sign Language. International Sign System is a compulsory course from the study field of Portuguese Sign Lanaguage accounting for 6 ECTS at the second year of the Bachelor degree on Portuguese Sign Language. It is taught in Portuguese.

The contents of this course focus on topics such as:

- History of the International Sign System
- Alphabet
- Individual presentation
- Numbers
- Family
- Seasons
- Climatic weather
- Hours
- Colors
- Professions
- World Capitals
- Countries
- Means of transport
- Space and gesture system

4. Communication Challenges Between Deaf and Non-deaf in Education

In Portugal, deaf students enrol in bilingual teaching that is offered in several reference schools until the level of secondary education. These schools centralize the required resources for bilingual

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[1] https://www.ipc.pt/ipc/en/unidade-curricular/international-sign-system/

teaching in Portuguese and Portuguese Sign Language (LGP). Nevertheless, deaf students are frequently a minority that faces particular challenges in education, including:

- The competences and the knowledge of LGP is not the same for all students; these competences depend on the frequency of previous contact with other deaf friends and family;
- The age when the student acquired deafness is also a key factor; students born deaf and those who became so after acquiring speech face very different barriers to communicate with deaf and non-deaf friends;
- Technical vocabulary has to be explained usinf terms/signs the deaf student can understand;
- New concepts have to be explained before introducing written materials that refer to these concepts;
- Coordination of the activities at the school to assure that visual attention is not required in parallel with other tasks; for instance, reading a PowerPoint and explaining at the ame time;
- Content should be provided in sign language;
- Information, mainly in written form, shoul be accpmpanied by images and/or examples of real cases/examples;
- Any spoken intervention must be preceded by a warning so the deaf students can understand who is intervening;
- All speech that cannot be provided in sign language should be done n fornt of the deaf students to facilitate lip reading;
- The efficiency of lip reading is approximately of 30%, i.e., only approximately 30% of the information is captured by a receiver used to lip reading. The remaining 70% are assumed/inferred;
- Beard, moustache and objects in the mouth, like a pen, compromise the perception of oral communication;
- When writing, deaf students have difficulties in the use of sinonyms, verb conjugations, conjunctions, morphological agreements and syntactic structures;
- When reading, deaf students may face difficulties to understand vocabulary, idiomatic expressions and complex syntactic structures.

4.1.   Survey on Communication between the Deaf and Hard of Hearing in Portugal

The survey was conducted online through a Google form. The students (approximately 19.000) and the academic staff (approximately 1.500) of tthe Polytechnic of Porto were invited to participate by email. We received a total of 252 answers from which 246 are validated.

Approximately 86% of the respondents has no regular contact with deaf colleagues while 13% does have. Two respondents are deaf.

66% believe that deaf people can read fluently and understand written Portuguese.

15% know sign language; 21% think sign language is the same in any country.

93% would like to learn sign language.

78% are not aware of International Sign. 90% would like to learn International Sign and 87% are interested in taking an elective course in International Signa if available.

4.2.   Guided Interviews on International Sign in Portugal

To complement the online survey and to grasp an understanding of the current standing of International Sign in Portugal we have interviewed teachers from a reference school for deaf students from kindergarden up to the secondary school, in Braga[2], colleagues from the School of Education of the Polytechnic of Porto teaching Portuguese Sign Language, deaf colleagues who work with us in sign language translation and the European Union of the Deaf[3].

In general, the opinions are coincident and reveal a very weak knowledge and use of Internation Sign in Portugal and in general. International Sign is mostly being used in international conferences and events of big dimension organized by the deaf communities.

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[2] Agrupamento de Escolas D. Maria II, https://www.aedonamaria.pt/
[3] https://www.eud.eu/

1.   How commonly is International Sign language used?

International Sign is not used in Portugal. Very few deaf know it. It is very difficult, not to say impossible, to find an interpreters who can sign International Sign.

2.   Does the interviewee use of International Sign language?

None of the interviewees had ever used International Sign.

3.   How do you learn International Sign language?

There are no courses available except for one exception[4] at the School of Education of the Polytechnic of Coimbra. This course is not meant to the public in genral; it is addressed to the students of the Bachelor course on LGP.

4.   How do you communicate with foreigner deaf if you don't know IS?

Deaf people from different nationalities communicate using signs from each ones sign language. We have has a chance to observe Portuguese and Brazilian deaf, who had never met before, communicating using LGP and LIBRAS (the Brazilian sign language) after a few minutes.

5.   How easy is it to understand International Sing language for someone skilled in national sign language?

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[4] https://www.ipc.pt/ipc/en/unidade-curricular/international-sign-system/

The experts say that it will not be difficult to learn International Sign if you already know a sign language. However, they claim that learnig International Sign from scratch, with no previous contact with another sign language, might be difficult since the channels used by sign language and spoken languages are deeply different.

6.   Have you ever seen International Sign language in use?

We had a chance to observe it being used at the COINES[5], the congress of the Brazilian institute for the education of the deaf, with more than 800 participants from all over the world, the majority of them being deaf.

7.   How difficult do you find International Sign language compared to your national sign language?

The interviewees had very little knowledge of International Sign; nevertheless, they believe it will be simple to learn by someone knowing another sign language given it simple grammar and the fact that the Interntionla Sign signa are adopted from other sign languages (mainly ASL, the American Sign Language).

8.   Do you think that it would be an advantage if only International Sign language would exist?

Definitely no.

9.   What are the advantages/disadvantages of the International Sign language?

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[5] https://www.ines.gov.br/coines

Sign languages are a very important facet of deaf cultures. International Sign miss this crucial elemnt of deaf culture and identity.

10.   Does International Sign language have any legal standing in your country?

No.

11.   Do you know of any variations in the International Sign language?

No.

12.   Do deaf people use IT courseware and digital content frequently?

Yes, deaf people use online content, mainly the yougsters.

13.   Are technological solutions (e.g. cochlear implants) well accepted?

Cochlear implants are seen as a intrusion into deafs- culture. In the Portuguese deaf community, cochlear implants are seen as a very benefitial technology by some but also as an intruder completely rejected by other.

14.   How difficult is it to learn International Sign language to a point where you are able to communicate?

No conclusive answers. The general opinion is that is you already master a sign language it will be simple to learn International Sign. However, if not, it will be more demanding since the learner will need to acquire destrexity is visual languages to be able to sign.

5. Discussion and Conclusion

The education of deaf students in Portugal is anchored on a system of bilingual teaching available in several schools of reference spread over the territory. These schools have in general deaf teachers and non-deaf teachers. School teachers learn Portuguese Sign Language at the university, in schools of education. Those interested in learning Portuguese Sign Language may attend courses offered by deaf associations and other related institutions. Portuguese Sign Language is recognized by the Portuguese Constitution as an official ;anguage for education.

International Sign is not well known at the deaf community. International Sign courses are not available to the public in general. In international contacts, the deaf communicate using each ones' mother language. This communication might be not too effective but seems to be suited for basic communication.

InSign will raise awareness and promote International Sign in the national deaf community. We expect it to be also very valuable for non-deaf students willing to learn the basics of visual communication and a basic vocabulary they can use for an improved communication with their fdeaf colleagues in Portugal and from other countries.

6. References

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[4] Agência Lusa, "Cerca de 50 professores de língua gestual concentrados frente ao Ministério – Observador," Observador, 2018. [Online]. Available: https://observador.pt/2018/01/22/cerca-de-50-professores-de-lingua-gestual-concentrados-frente-ao-ministerio/. [Accessed: 2019].

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[9] A. B. Baltazar, "Intérprete de Língua Gestual em contexto/registo audiovisual," Escola Superior de Educação do Porto, 2012.

[10] Portuguese Constitution, "CONSTITUTION OF THE PORTUGUESE REPUBLIC".

[11] "Despacho conjunto no 198/99 de 3 de Março dos Secretários de Estado da Administração Educativa e da Educação e Inovação," Diário da República II Série, vol. 98, 1999.

[12] M. do C. Gomes, "O Ensino do Português num Contexto de Educação Bilingue," Rev. Divers., no. 25, pp. 10–14, 2009.

[13] H. Carmo, M. Martins, M. Morgado, P. Estanqueiro, Coordination by F. Cavaca, "Programa Curricular de Língua Gestual Portuguesa, Educação Pré-Escolar e Ensino Básico" Ministério da Educação, Direção-Geral de Inovação e de Desenvolvimento Curricular, DL 139/2012, Lisbon, 2012.

[14] Paragraph h) of item 2, article 74 of the Constitution of the Portuguese Republic.