INTERNATIONAL SIGN EVERYWHERE: TOWARDS INTERNATIONALISATION OF EDUCATION AND INTERNATIONAL MOBILITY OF DEAF STUDENTS

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ABSTRACT

The inclusion of deaf students in education has been a topic of debate and research for a long time. Deaf students experience numerous communication challenges, which is especially true for communication with those from other nationalities due to the lack of a common (sign) language. The Erasmus+ project InSign (Advancing inclusive education through International Sign) promotes the internationalisation of education and the international mobility of deaf students. This paper presents a comparative survey among five European countries aiming to inform the research community about the common challenges and perception of the communication abilities of deaf people. The results indicate that there are many misconceptions, especially from people who do not have contact with the deaf community.

INTRODUCTION

Due to their hearing loss, deaf people communicate by other means. The most expressive and non-limiting of which is definitely sign language. Sign language is a visually-sign language system with a particular setting, position, direction and movement of hands and fingers, and face mimicking. People with either severe or profound hearing loss use mainly sign language as a communication language. According to [1], in 2013, there were, globally, 138 sign languages, and in Europe, there are 47 different sign languages, excluding Makaton.

This paper is based on work done in Advancing Inclusive Education Through International Sign - InSign project. The results are a collection of data gathered from the five project partners from Cyprus, Germany, Greece, Portugal, and Slovenia. The Erasmus+ InSign promotes the internationalisation of education and the international mobility of deaf students, which is a specific cluster in the European Higher Education Area where students have little support that InSign plans to extend. By raising awareness and promoting the use of International Sign as a lingua franca by deaf and non-deaf users, InSign wishes to tear down communication barriers and open the doors of internationalisation and globalisation to deaf students.

In this paper, we will shortly look at what International Sign is and how it compares to natural sign languages. The main part of the paper will be dedicated to the analysis of a survey that was conducted primarily with

students to measure how they perceive deaf people, their difficulties in the education system, how they understand sign language, and whether they are interested in learning their national sign language or International Sign. The last section contains the discussion and conclusion.

SIGN LANGUAGES AND INTERNATIONAL SIGN

In general, there has been much effort put into improving the accessibility of deaf persons to all areas of life. The progress in terms of development and support for the national sign languages has been increasing over the years. In all of the included project partners, natural sign languages have established learning processes and have organisations supporting, developing, and teaching them. They are also relatively well supported by technology with different online tools to help communications and learning. However, there are still issues. One of the primary deficiencies of governmental support for the deaf communities in project partner countries seems to revolve around education which is shown in the low average educational level of the deaf. The most significant appears to be the lack of teachers who can use sign language, and schools that are fairly rare are usually far away and therefore not convenient for families with deaf children. Education options for deaf students also become a big limiting factor as they progress to higher levels of education.

International Sign (IS) is a form of signing for communication between signers with no other language in common [2], [3], [4]. IS signs are combined from the signer's own natural sign language mixed with highly iconic signs that can be understood by a large audience [5]. IS is therefore considered to be a mixed language, and thus, it is often characterised as pidgin [6]. However, it has different characteristics than natural sign languages, which possess a standardised lexicon and grammar. Thus it is difficult to refer to IS as language. The World Federation of the Deaf (WFD) uses the term IS, rather than International Sign Language, to indicate that IS does not have full linguistic status but is a translanguaging practice. Further, it is difficult to refer to it as a universal language since IS is hardly understood by Eastern signers. This is related to the different features between Eastern and Western Sign languages [2]. Although IS is promoted as lingua franca (at least in the western world) for globalising the deaf communities and used at international conferences, there is a lack of International Sign literature.

International Signs are made by descriptive meanings, and many of the signs are borrowed from various natural sign languages. They are specific signs that are made by the necessity for communication at conferences and councils. Each speaker uses words from his/ her local sign language vocabulary, so there are more than one signs for one meaning. One of the common techniques in IS is the presentation of concepts in multiple forms, which make the information accessible to the audience despite the noisy channel. Describing the IS as a noisy channel is related to the limited number of IS vocabulary, diverse audience, and low degree of conventionalisation.

In contrast with national sign languages, the support for the International Sign is basically non-existent in all of the project partner countries. None of them reported any form of IS inclusion in education or any other less formal learning opportunities, with one small exception. As a result, those who wish to learn the IS are left to their own devices. This is especially problematic as we have noticed a general lack of IS learning materials, especially in languages other than English. This is unfortunate as many project partners report interest in learning IS, especially from the younger population, who find such a form of communication especially valuable for international communication (for travel or over the internet) and entertainment. The interest in learning a sign language and IS is also supported by the results of the survey performed in the project.

However, before we focus on the survey and its results, we would like to quickly discuss the feedback from guided interviews. We have performed guided interviews with members of the deaf community on the topic of IS to get their perspective on the use and usefulness of IS in their communities. As already stated before, they have confirmed that there are no official ways in which to learn IS, but also opportunities to use it with or listen to an advanced speaker are rare. The biggest driving force behind IS and seemingly the most invested in acquiring the knowledge to use IS is the younger generation. This is mainly related to communicating while travelling and consuming international media content. Interviewees have also been quite vocal and consistent in their opinion that the IS is to be just a supporting tool to facilitate communication between different nationalities and is not to become a substitute for actual sign languages.

SURVEY ON COMMUNICATION BETWEEN DEAF AND NON-DEAF

The survey was published in higher education environments across the five project partners. The data collected is therefore primarily from students and their teachers. The survey's main goal was to gauge participant's perception of challenges deaf people face, how they think sign languages work, their interest in learning sign language, and to collect ideas on what could be done to improve the deaf student's education experience.

The survey was translated into national languages, to not require the knowledge of English and performed by each of the project partners. Here, we will present the results combined from all participants from all partner countries. After cleaning the data, we were left with the answers from 1107 people who participated in the survey. The breakdown of the collected data by partner country is presented in table 1.

Table 1: Number of participants in the survey by the partner country.

	Number	Percent
Cyprus	40	3.6%
Germany	365	33.0%
Greece	268	24.2%
Portugal	244	22.0%
Slovenia	190	17.2%
Total	1107	100.0%

RESULT ANALYSIS

One of the first questions the participants answered was whether they have any contact with deaf people (or if they are themselves deaf). The breakdown of the answers is available in figure 1 (top values in the pie chart is the absolute number of participants, and underneath it is the share of responses in percentage). We will use this information going forward to look at whether or not participants that have a personal connection to the deaf community have answered questions differently.
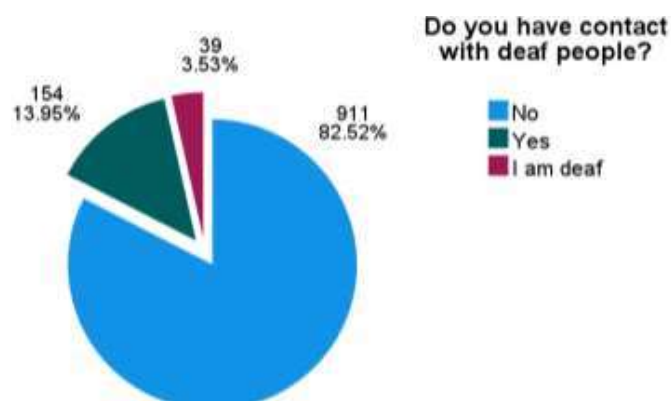

Figure 1: Participants' contact with deaf people

Almost three quarters (72%) of the participants believe deaf people can read fluently and understand written language. However, when these results are grouped by whether or not the participants have contact with the deaf community, there are noticeable differences between groups (Figure 2). Those that do not have contact are much more likely to think deaf people can read and write. They represent close to three-quarters of all participants with no contact with deaf people, while those that do have contact are much more evenly split. This does show that there is some misconception in the general public as the deaf do often struggle with learning the written language.
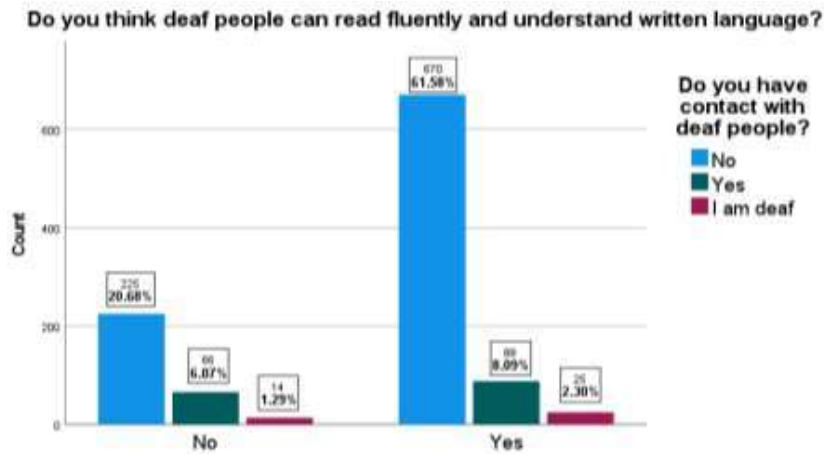
Figure 2: Perceived ability to read and write grouped by contact with deaf people.

In the answers to the question on how deaf people communicate with each other, a relatively steady rise through the four possible answers (participants could mark as many of the methods as they wanted), where writing is the least common, followed by lip-reading, then gesturing (common gestures, not a language or some sort of an established system), and finally, sign language which was the most commonly given answer with very close to 88% response rate.

The order of most common answers to the communication method among the deaf is different depending on whether or not they have contact with deaf people (see Figure 3). Writing and sign language are the least and most common method regardless; however, there is some significant difference in how common gesturing and lip-reading are perceived. Gesturing was much more popular with participants who do not have contact with deaf people. This was completely flipped in the category of deaf participants, where lip-reading was much more popular. The participants who have contact with deaf people but are not themselves deaf, bridge this gap by showing no preference to either of the two methods of communication.

Interestingly, data collected from different project partner countries often don't have any significant differences in how participants answered the question. Naturally, there are some differences, but the general trend is the same among all countries, or the participant demographics could explain it (e.g. Cyprus had a relatively small number of participants but a very high percentage of deaf people). These relatively consistent results from project partners could indicate no significant cultural difference (at least among these countries) in how deaf people or rather their communicational capabilities are perceived. However, the answers to the question on the communication methods deaf people use to communicate with each other are a notable exception. The biggest outlier here is the results from Portugal, which is the only country where the participants have not overwhelmingly chosen sign language as the primary communication method but gave much more credence to gesturing. Gesturing was also the second most popular in Greece and Germany, while Lip-reading was the second most common answer in Cyprus and Slovenia.
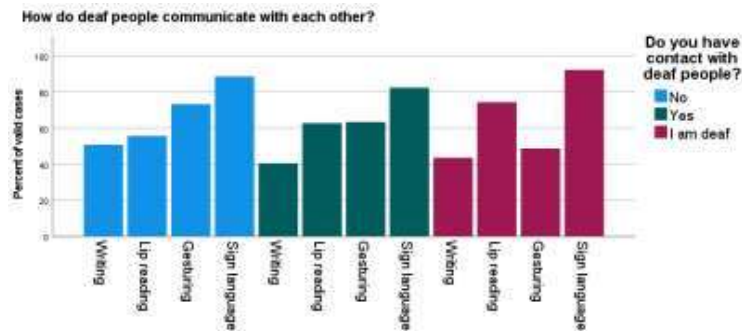
Figure 3: How deaf people communicate with each other, grouped by contact with deaf people.

The differences in communication methods are less evident in the communication between the deaf and non-deaf (Figure 4). There is no large disparity between answers from people who have and those who don't have contact with deaf people, with the only exceptions being lip-reading, which was marginally more commonly and gesturing, which was less often selected by deaf people. Surprisingly, all groups have a small number of participants who believe deaf people do not communicate with non-deaf.
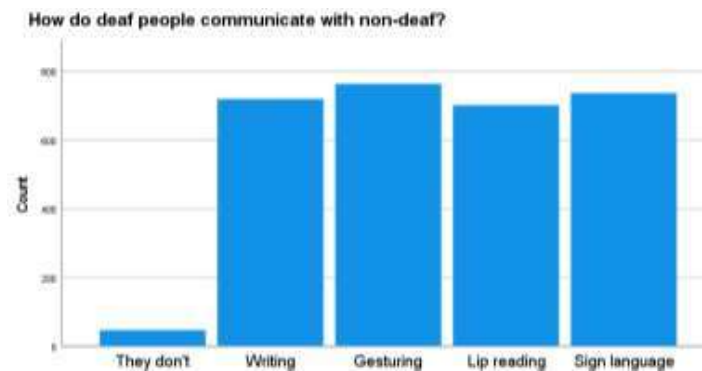

Figure 4: Answers on how deaf people communicate with non-deaf.

One of the more revealing questions was whether the participants think sign language is different from country to country. Almost one quarter (24.1%) believe sign language does not change across different countries. However, when grouped by contact with deaf people (Figure 5), it becomes more obvious that those who do not have contact with deaf people are the most likely to believe there are no differences between sign languages used in different countries.
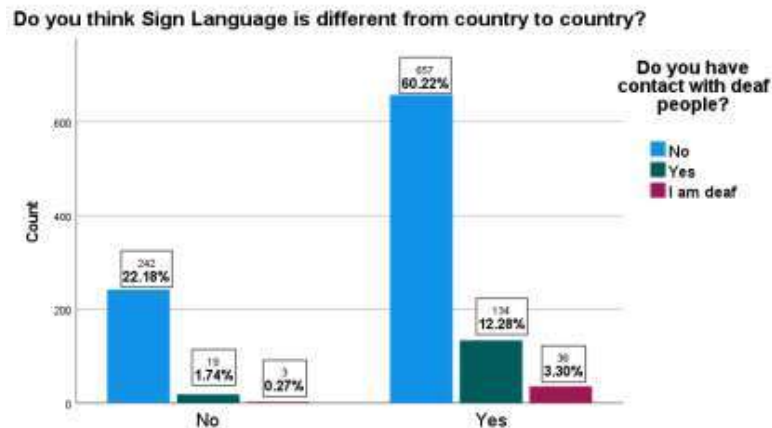
Do you think Sign Language is different from country to country?

Figure 5: Is sign language different from country to country, grouped by contact with deaf people.

We have also asked the participants how interested they were to learn their national sign language and/or the IS. Interestingly 80,6% of them were interested in learning sign language, and 80,3% were interested in learning the IS, even though only 17,8% of participants have previously been aware of the IS. As expected, deaf people, followed by those that have contact with the deaf community, are much more likely to have heard about IS before. Given the option to take a sign language course in their studies, 73,4% of participants answered they would be interested in doing so. Interest was slightly higher among the deaf and those who have contact with deaf people (Figure 6); however, still very high even among those with no interaction with the deaf community.
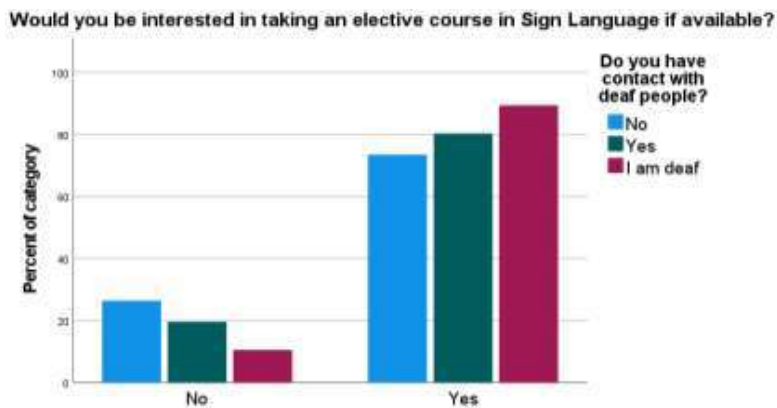
Would you be interested in taking an elective course in Sign Language if available?

Figure 6: Interest in taking an elective course in sign language, grouped by contact with deaf people.

DISCUSSION AND CONCLUSION

IS is not a real language, nor is it the aim of this project to replace natural sign languages. This nature of the IS and its at least partial dependency on the signer's knowledge and their primary sign language was also regularly emphasised by the participants in our guided interviews. This, we believe, could also be one of the major challenges we are faced with as we proceed with the project. However, in this paper, we focused on the short and general descriptions of the current situation of natural sign languages and the International Sign in project partner countries and the perception of the deaf people's communicational abilities.

Comparatively, the support for International Sing is much lower than for natural sign languages. In none of the project partner countries does the International Sign have any legal status, and there are basically no learning opportunities to learn it. The best option, short of going to events where it is used, is therefore on the internet, where again any learning materials are surprisingly scarce.

The survey results of more than 1100 participants indicate that there is a meaningful discrepancy in how the communication capabilities and options are perceived between those people that have and those that do not have any significant contact with the deaf community. Interestingly, results from across Cyprus, Germany, Greece, Portugal, and Slovenia where the survey was performed did not show any large differences, possibly indicating that there is no significant cultural difference (at least among these countries) in how deaf people or rather their communicational capabilities are perceived.

The future outputs of the InSign project will facilitate access of deaf students to education and provide effective ways to communicate among deaf and non-deaf. In this context, InSign will provide the community with a beginner's course on International Sign addressed to the deaf and non-deaf along with an automatic bidirectional translator from partners sign languages to International Sign represented by a 3D avatar. These provide a good starting point for further research towards internationalisation of education and international mobility of deaf students, e.g. extending the International Sign course to advanced levels, provide technical and non-technical courses in International Sign, extending the automatic translators to accommodate more sign languages, etc.

ACKNOWLEDGMENT

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