Abstract

As numbers of graduates with impairments are actually decreasing, higher education access and study conditions are in need of improvement for students with sensory impairments in Switzerland. A survey was carried out in order to determine the status quo in higher education for Swiss deaf, blind, visually and hearing-impaired individuals. The current paper presents the survey, discusses methodological and technical issues and points out preliminary results concerning Swiss-German deaf and hearing-impaired individuals.

1 Research Background

Hearing and sighted individuals from the majority society often remain unaware of the hurdles that deaf, blind, visually or hearing-impaired individuals encounter in the Swiss school and education system. This lack of understanding with regard to existing hurdles blocks possible pathways to higher education for deaf, blind, visually or hearing-impaired individuals and renders it still hardly attainable.

A project launched jointly by the Zurich University of Applied Sciences and the University of Geneva tackles this situation with a focus on barrier-free communication. Sensory impairments entail specific communicative needs that can be met both linguistically and technologically. Consequently, inclusive access to tertiary education requires sophisticated combinations of linguistic support and technological tools.

The initial phase of the project involved determining the target group's experience with linguistic support and technical aids in their educational path up to their professional occupation. A Swiss-wide survey was designed and carried out in 2017-2018. The goal was to document where and how inclusive access already is in place for the target groups, to describe the status quo of assistance practised in the Swiss education system, technological aids and linguistic support and to determine which kinds of barriers they are facing when progressing from obligatory through secondary to tertiary education.

2 The Survey

2.1 General Aspects

A Swiss-wide study targeting individuals with sensory impairments must take in cosideration specific communication needs in designing, implementing and distributing the survey. The objective was to reach the deaf, blind, visually and hearing-impaired in all Swiss language regions, and to gather their experiences with the educational system, with learning, studying and working life. In addition, the survey was directed at those involved in educating and supporting sensorily impaired students, e.g. relatives, staff members, sign language teachers and students, in order to better understand challenges involved in accessible and inclusive tertiary education. Questionnaires were prepared for nine profiles (§2.3), all Swiss language areas (GE, FR, IT), their associated


32 For the BFC project cf.
https://bfc.unige.ch/en/project/research-areas/
sign languages (DSGS, LSF-CH, LIS-SI), and in English.

2.2 Designing an inclusive survey

Taking into account studies on educational outcomes for deaf/hearing-impaired individuals, barrier-free online questionnaires were developed using SurveyMonkey. For Sign language users, all questions were introduced as sign language (SL) videos combined with the corresponding Swiss official languages. Due to technical limitations, they could not answer through self-recorded videos. For that reason, SL users were asked to respond and comment in the corresponding written language included in their SL version questionnaire (i.e. either German, French or Italian). An English version without accompanying sign language videos was offered for participants feeling more comfortable in that language.

Depending on the profile of the participants, a maximum of 59 questions (profile A) was asked. The questionnaire included open-ended and closed questions and allowed for additional comments. Since inclusion was paramount in preparing the questionnaires, stakeholders from deaf and visually impaired target groups, as well as educational institutions were asked for comments. Adaptations were made in order to render the questionnaires – as much as possible – barrier-free.

2.3 Range of participants and procedure

The survey was conceived so that relatives, members of organisations, SL teachers, students and interpreters could be included via different profiles. Emails in all official languages introducing the study and research team, with survey links to all seven language versions, were sent to 118 Swiss institutions, individuals and organisations. Addressees were asked to spread the survey. Reminders were sent after two weeks, and data were collected once after 30 days, and finally after 60 days, on April 19, 2018.

A total of N=210 valid responses distributed over the target groups’ nine profiles were gathered:

A. Deaf and hearing-impaired individual (N=92)
B. Blind and visually impaired individual (N=12)
C. Relative of deaf/hearing-impaired individual (non-deaf) (N=23)
D. Relative of blind/visually impaired individual (N=1)
E. Staff member of organisation supporting the deaf/hearing-impaired (N=47)
F. Staff member of organisation supporting the blind/visually impaired (N=10)
G. Sign language interpreter (N=4)
H. Sign language teacher (N=9)
I. Sign language student/learner (non-deaf) (12)

While six profiles (A, C, E, G, H, I) were concerned with the situation of the deaf and hearing-impaired, three profiles (B, D, F) were directed at the blind and visually impaired. Profiles reflect a larger gap in knowledge on the first target group and a different linguistic situation they are in: deaf and hearing-impaired individuals using a sign language are bimodal, bilingual and often L2 speakers of the majority (official) language. For that reason, linguistic support by educators, interpreters and translation tools are crucial to their educational process.

3 Preliminary Results

3.1 Outcomes in general

The distribution of N=138 valid responses in Swiss-German/DSGS, N=66 in French/LSF-SR, five in Italian/LIS-SI and one in English, reflects well Swiss regional differences in demography and size. Overall turnout was strongest in profile A for deaf and hearing-impaired individuals (N=92), suggesting that the number of questions (59) did not discourage a highly motivated target group. Profiles C (relatives: N=23) and E (staff: N=47) associated with the deaf/hearing-impaired had high turnouts compared to those relating to the blind/visually impaired (D: N=1; F: N=10); only a small number of SL teachers (H: N=9), SL students (I: N=12) and SL interpreters (G: N=4) took part. Rather low turnouts in all profiles concerning the blind and visually impaired individuals were observed.

33 Cf. Boyes Braem et al. 2012, Napier/Leeson 2016 for educational and sociocultural issues regarding sign languages.
impaired may reflect a higher degree of accessibility already in place for this target group. Noticeably larger numbers of higher education graduates among the visually impaired compared to the deaf and hearing-impaired seem to support this view. For the German-speaking part of Switzerland, profile A (N=75: 47 deaf, 28 hard of hearing) contrasts sharply with profile B (N=9: blind/visually impaired).

3.2 Focus on Swiss-German deaf / hearing-impaired respondents (Profile A)

Respondents (N=75). 60% of the deaf or hearing impaired respondents were female, 36% male and 4% did not disclose their gender. The age group with most respondents was that of 36-45 year olds (25.3%, 19 individuals); the age groups from 26-35, 46-55, 56-65 and 66+ were evenly distributed between 16% and 18.7% (12-14 individuals). Only the age group of 18-25 year olds was underrepresented with 5 individuals (6.7%).

Experiences in school and higher education (N=75). 88% of those who answered these questions commented specifically on primary school experiences, ranging from SL not being allowed in the classroom to inadequate technical aids and infrastructure in order to accommodate multiple pupils with different needs, large and noisy classes, integration classes without SL interpreting, to teachers being insufficiently competent in SL and dominance of spoken language as a medium of instruction.

Named as crucial obstacles both in secondary school and tertiary education, were inadequate forms of instruction (49;38 responses), a lack of interpreting services (34;34 responses), and non-inclusive teaching (35;29 responses); qualitative analyses on additional comments (37;35) are under way. Results seem in line with Rodríguez Vázquez et al. 2018.

Among the Swiss-German deaf and hearing-impaired respondents (N=75), a high number (41.3%) have been or are studying at university level. This proportion is not representative of that target group’s actual numbers of individuals succeeding in tertiary education. Rather it reflects a need to share experiences and possibly improve the situation by those who have succeeded.

Career prospects (N=75). 13.3% report negative experiences when applying for an apprenticeship, 17.3% when applying for a job position, 50.6% feel that perspectives on the job market are unsatisfactory, and 57.3% of the respondents feel discriminated against in not being able to pursue a desired career path.

Linguistic and communication issues (N=75). While 49.3% (37) are users of Swiss German sign language, 30.6% (23) rely on gestures accompanying spoken language and 20% state they use neither, which means they were trained in spoken languages only. Multilingualism scores high, with 49 respondents (65.3%) using three or more languages, 20% being bilingual and only 14.6% monolinguals. Bilingual bimodality with SL and spoken language as simultaneous L1 was experienced only by 8 respondents (10.6%). This linguistically diverse picture leaves many questions unanswered.

Reliance on SL interpreting (N=75). Even though only 49.3% are using SL (DSGS), 66.7% indicated their reliance on SL interpreting or translation services; 33.3% have never used such a service. The situations named most frequently for interpreting or translation services are professional (57%) and educational situations (school, vocational training, university, 62%). 57.3% of the respondents have experienced a situation in which an interpretation or translation service was missing or insufficient. The frequencies of such situations are given in Table 1.

| Regularly (e.g. almost every time I encounter public services) | 9.3 |
| Often (e.g. at least once a month) | 10.7 |
| Sometimes (e.g. a few times a year) | 17.3 |
| Rarely | 17.3 |
| Never | 2.7 |
| No answer | 42.7 |

Table 1. Frequency of missing language services (SL interpreting, translation with accompanying signs, in %).

3.3 Preliminary Conclusions: Inclusive Access to Swiss Higher Education?

Based on the preliminary results, it appears that deaf and hearing-impaired individuals experience vast disadvantages during
obligatory and higher education. Linguistic barriers are created by a situation where an inclusive bilingual-bimodal education is still not in place.

The reasons seem to be as much a lack in technological aids as in insufficient numbers of SL interpreters, as well as too few teachers using sign language in the classroom. Other services too, e.g. speech-accompanying signs, class room arrangements for lip-reading or provisions for delayed reception with auditory devices in class rooms appear to be largely unsystematically employed. Inclusive access thus remains a lofty goal at the status quo of higher education.

Questions with regard to learning opportunities, specific linguistic issues and accessible tools will have to be dealt with more concisely. A follow-up qualitative evaluation by the help of sign language interviews is needed in order to gain a closer insight.

3.4 Feedback and Open Issues

Feedback from deaf and deaf-blind users pointed out problems of inclusiveness in the survey. We were aware of possible accessibility hurdles for deaf-blind users and for those using sign language as their principal medium of communication. ‘Universal design’ could not be implemented for technical reasons. Video-reply was not possible, and the written language remains an L2 for many signers. For that reason, in-depth semistructured, narrative interviews in all Swiss sign languages are planned in order to gain deeper insights. Qualitative evaluation will be employed in order to determine ways of changing curricula, the teaching praxis and learning environments.

Low numbers of responding SL interpreters were probably due to reservations on the part of the SL interpreters’ organisation in Switzerland concerning professional ethics. Since SL interpreters are an important professional support on which SL users rely on, especially in school and higher education, their responses would have been valuable.

Schools and teaching staff engaging with deaf and hearing impaired students did not participate in sufficient numbers in our survey, even though we tried to reach all schools and educational institutions known to us. Possibly another way of engaging educators and sampling their experiences needs to be thought of. A more inclusive access to higher education for deaf and hearing-impaired individuals in Switzerland may be ascertained only with the help of all stakeholders involved in providing support and services.

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