

"DEAF LEARNING": USING A VISUAL METHOD TO TEACH WRITTEN LANGUAGE TO THE DEAF

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Abstract

The majority of deaf people prefer to use the visual channel for communication, choosing a national sign language instead of a spoken language. In many countries, Deaf education is still not bilingual, therefore deaf people frequently have problems with learning and using the written language of their country. The Erasmus+ project "Deaf Learning" addresses the need for a visually-oriented written language course for the levels from A1 to B2. The main target group is that of young deaf adults aged 16 to 25 years. A secondary target group are older deaf people who are interested in improving their written language competence.

Keywords: *Deaf education, Written language teaching, Sign language, Interactive course.*

1. Introduction

Most deaf people use one of the national sign languages as their first or preferred language. Unfortunately, in most European schools, the language of instruction is still the spoken/written language of that country. This poses huge problems for deaf students. As they do not have access to the acoustic channel, they can suffer serious consequences in their national language acquisition process (Caselli, Maragna, & Volterra, 1994; Volterra, Capirci, & Cappelli, 2001; Chesi, 2006; Bertone & Volpato, 2012). During their lives, they seldom get information presented in a visual way and they keep struggling with their difficulties with the written language throughout all their education paths. As they live in a hearing world, most information is transmitted via spoken or written language and not in a visual way; this also holds true for Deaf education, where they therefore often suffer from poor reading and writing competence (e.g., Holzinger, Fellingner, Strauß, & Hunger, 2006; Krausneker & Schalber, 2007). The Erasmus+ project "Deaf Learning" (2015-1-PL01-KA204-0165; homepage: www.pzg.lodz.pl/deaflearning) has addressed the abovementioned issue by preparing a course that takes into account the needs of the deaf.

2. The "Deaf Learning" Project

The five partners (Poland as coordinator, Austria, Italy, Lithuania and the United Kingdom) have each designed a written language course for deaf people based on the Common European Framework of Reference for Languages (CEFR) for the levels from A1 to B2. The courses share a common underlying structure but are adapted for each country with respect to country-specific issues or the way grammar is taught. The five main themes cover topics which are relevant to the everyday life of deaf people, e.g., "Money Management" or "School and Career", and each topic is divided into six subtopics. For A1, the teaching materials were completed for each subtopic. In addition, the first main theme ("Relationships") is accompanied by a Moodle course with interactive exercises. For A2 to B2, the partners developed lesson plans and 16 reading texts on which teachers can base their actual teaching. The materials include guidelines for the teachers with background information and suggestions on how to use the course.

2.1. Survey of the Target Group

During the very first stages of the project, all project partners carried out a survey among the deaf community to get their feedback on their wishes and/or needs. The results were used as the basis for the course design.

Deaf people in all five countries were asked for a general feedback on the final aim of the project and a more detailed feedback on their educational backgrounds and their particular linguistic needs in relation to the contents of the proposed course.

The more general section of the survey was developed on the basis of the already-existing model used in the project "Give me a Sign" (Project ID: 2015-1-PT01-KA202-012971); a special section was added, dealing with the present project. The questionnaire was developed in English and subsequently translated into the national written languages (German, Italian, Lithuanian and Polish) as well as Austrian Sign Language and International Sign (IS) for those partners who did not produce a signed version of their own. The text and the sign language videos were uploaded to the online platform typeform.com. Each partner sent the questionnaire to deaf contacts, Deaf associations, and other stakeholders in order to reach more deaf people matching the target group.

The partners from Austria, Italy, and Poland each collected more than 20 responses, allowing the researchers to compare the results.

2.2. Data from Austria and Italy

In Austria, 72 % of the respondents had a profound or severe hearing loss, but only 28 % were native signers (the others learned Austrian Sign Language later in life, mostly aged 3 to 8), but 68 % regard their sign language competence as very good. In Italy, the majority of the respondents (50 %) had a profound hearing loss; 35 % had a severe hearing loss. 50 % of the Italian respondents acquired sign language from birth, while 23 % acquired it between the ages of 3 and 8 years. A great number of respondents in Italy (65 %) claimed to have a very good sign language competence. The majority of the Austrian deaf people reported moderate to bad experiences during their education (especially from compulsory education on). In Italy, the majority reported moderate or good experiences during their compulsory education. Those who attended an Italian university reported moderate or bad experiences.

The main complaint from the Austrian as well as the Italian deaf people was the lack of sign language use during classes; in Italy, they also mentioned the over-simplified contents provided by the teachers. In both countries, the interviewees preferred reading to writing, because – as one Austrian respondent put it – "writing German is too difficult". Mostly, the interviewees from both countries wanted to improve their grammar, but also their vocabulary. Most of the respondents in Austria as well as in Italy chose "Relationships" as the most interesting topic.

3. The Course

The "Deaf Learning" course differs from a regular course for foreigners who are learning a second language. The special features of the present course are:

- it is based on a sign bilingual teaching model;
- grammar topics are chosen on the basis of literature studies on deaf productions in written language;
- lessons are planned to be flexible and adaptable to a heterogeneous group of learners (as deaf learners are);
- since CEFR includes skills such as listening and speaking which do not apply to deaf learners, the framework serves only as a general pattern;
- deaf students are addressed as false beginners whose mother-tongue competence can range from good to poor, which influences their written language acquisition process;
- some lessons focus on Deaf culture (e.g. experience of Gallaudet University; deaf athletes telling their story; describing a classroom environment for deaf students, etc.);
- special attention is given to visual inputs (both in the face-to-face lessons and in the Moodle course).

In the following subchapters we provide a description of the sign-bilingual strategies applied (3.1.), the teaching approach and methodologies suggested (3.2.), and, finally, the visual impact of the course (3.3.).

3.1. Sign Bilingual Strategies

The "Deaf Learning" course is based on a bimodal-bilingual approach, meaning that the national sign language is used as the language of instruction (for the advantages of sign language for deaf and hearing-impaired people, cf. Krammer, 2013). According to specific teaching methods currently applied at Gallaudet University, the sign language (usually the first language acquired, L1) can be used in alternation with the national written language (usually L2) in what is called Concurrent Use frame methodology. The three patterns suggested for the "Deaf Learning" lessons are: Purposeful-Concurrent-Use, Preview-View-Review, and Translation (Gárate, 2012).

Purposeful-Concurrent-Use consists of a planned and well-thought-out alternation of written and signed codes, in order to underline some special topics. For instance, while teaching a lesson in sign language, the teacher continuously writes down, underlines (in a presentation), or fingerspells important terms and definitions.

Preview-View-Review is applied when preview and review moments are delivered in L1, while the core of the lesson is delivered in L2 (or the other way around: preview in L2, view in L1, review in L2).

Translation consists of translating parts of the lesson from one language to another, in order to make sure that the students have understood them. Among the sign-bilingual strategies applied to the "Deaf Learning" course, there are activities based on contrasting sign language and written language, highlighting their differences and similarities.

3.2. Teaching Approach and Methodology

The lessons are based on a special cycle in which the teacher introduces each subtopic with materials designed to meet the individual needs of the students (e.g., PowerPoint presentations, keyword posters, videos, discussions). The following steps of the lessons are connected to this introduction/preview: a short text for a contrastive grammar analysis with subsequent grammar explanations and exercises, leading to reading comprehension and writing exercises. Each lesson ends with a brief summary/review of the contents and some homework.

Within the preview and the review, the teachers can still adjust the lesson according to the needs of their students. When the students show a certain degree of familiarity with the grammar topic of the lesson, for instance, the teachers can choose to move the grammar explanation/exercises after the reading comprehension, in a bottom-up process. The students will be led to the grammar rules by the text itself: the relevant grammar constructions will appear in the text so that the students will be able to recognize them and to formulate their own hypotheses about them. If it turns out that the students have problems with working out the grammar, the respective explanations/exercises can be delivered by the teacher before the reading comprehension, following a top-down approach.

The Task-Based Language Learning and Teaching approach (TBLT) has also been taken into consideration, especially for those lessons in which the students are supposed to interact in written form. A task can be defined as a goal-oriented communicative activity aiming at the production of a specific outcome, in which the main purpose is exchanging meanings and not producing language forms (Willis, 1996). According to the task-based approach, the core of the lesson is the task phase itself, preceded by a pre-task phase and followed by a language focus phase. In the pre-task phase, the topic is introduced to the learners, and topic-related words and phrases are activated. During the task, the learners can use whatever knowledge they already have in L2 in order to solve the task. Before or during the task, the learners have the chance to read (or hear, in case of hearing students) examples of L2 in use, which they can keep as models or just process as language input. The teacher's feedback should come when the students want it most: at the beginning stage, during planning, or at the final stage, during the report. Finally, the language focus phase allows the learners to analyse some of the features of the language they have already processed during the task and practice the components (explicit study of language form). TBLT can be combined with the lesson cycle by considering the preview as a pre-task activity, the writing activities as part of the task, and the review and the corrections as the language focus. Exposure to the L2 can be provided by the teacher as necessary. Deaf students appreciate working for a practical aim (i.e. solving a problem, making a presentation, playing a game, etc.), but they get easily distracted, and cooperative tasks can last very long, which may compromise the language focus moment. Therefore, TBLT is only suggested as one possible interpretation of particular lessons.

Teachers are provided with this high degree of flexibility because deaf learners are false beginners and their language competence is sometimes unpredictable. As attested in literature (Vollmann, Eisenwort, & Holzinger, 2000; Chesi, 2006; Trovato, 2013), deaf people's written language production can be considered as a non-standard language, characterized by the lack and/or the wrong use of functional words (articles, prepositions, conjunctions, etc.), auxiliaries and verb conjugation, pronouns, and noun-

adjective/verb-subject agreement. Despite acknowledging these facts, it is impossible to predict which grammar elements will be tricky for all students. Variables like degree and age of the hearing loss, the age of acquisition of a sign language, having hearing or deaf parents, the type of school attended, etc., make deaf learners very different from one another, creating heterogeneous groups of students even within small numbers (cf. Caselli, 2014).

The prototype course was tested with deaf students in Italy and in Austria. While Italy focused on the main target group, Austria tried out the lessons with deaf collaborators who are fluent signers to represent the secondary (older) target group. The respective feedbacks were integrated into the final version of the course (for details on the testing, cf. Volpato, Hilzensauer, Krammer, & Chan, 2018, in press).

3.3. Visual Impact of the Course

The visual impact of the course is realised through the sign-bilingual method as well as through key pictures in the texts (especially at the basic language level), in order to aid the students' comprehension of each part of the text and the supporting Moodle course. All the materials for A1 which are to be printed are designed in a very simple and uncluttered way: for the activities, the instructions are kept linguistically simple and short to make it easier for the students to carry out the tasks by themselves and each page contains only one or two exercises; the texts for the reading activities are true examples of each written national language (slightly adapted at the most), but still rich in language structures according to the respective level of difficulty.

For the grammar explanations, the text was kept short and concise (with overview tables, if appropriate). Free clipart was used to visualise the contents, furthering the students' understanding. For example, the definite articles and the three respective genders are represented by the picture of a family: man (male gender), woman (female gender) and children (neutral gender). The same picture shown twice serves to explain the plural forms. An officer giving orders embodies the imperative form, etc. Funny pictures do not only help the students to understand/memorise the grammar sections, but they also serve to lighten the mood.

The materials of the first six A1 lessons from the face-to-face course also served as the basis for the accompanying Moodle course. The Austrian Moodle version follows the structure of the face-to-face course, but the contents were adapted and/or simplified so that students can work with the course on their own (although it is recommended to use it in connection with face-to-face classes). Moodle allows not only the insertion of pictures but also of sign language videos; the same holds for the H5P exercises that were used. H5P offers a wide range of possible activities (from creating hotspots in pictures or graphics to marking something in a text) and allows the design of visually attractive exercises. The Austrian course designer opted for an automatic evaluation of any exercise where no student-teacher interaction is necessary (for some of the exercises, the students have to upload text and/or video files, which need to be corrected individually by a tutor): H5P corrects the exercises in a way that is ideal for visually-oriented people, e.g. by highlighting or marking correct and wrong answers with different colours and showing gold stars for correct answers. It is possible to add feedback (e.g., "Please look at the explanations again", when the answer was wrong), to reveal the correct solutions, and to repeat the exercise. If an activity consists of more than a single question, a progress bar is provided for the students' orientation (for information on the Moodle course, cf. also Volpato et al., 2018, in press).

4. Conclusion

The challenges in the lives of deaf people who are using a sign language as their first or preferred language are manifold. This is due to the fact that in most countries the education is not adapted to their visual needs, which may have serious consequences on their overall development. Most of them leave compulsory school with far less knowledge (in all areas) than their hearing peers. The "Deaf Learning" language course addresses this well-known fact – which is often neglected by the governments – by developing a course which takes into account the specific features of deaf learners: sign language is the language of instruction; teachers who want to deliver the course must be fluent in sign language and they have to adapt to the needs of the students, following a student-centred approach. Especially at the levels A1 and A2, the teaching and learning materials must be kept very visual and simple; also, they must have a good and clear structure. This holds especially for the grammar explanations and exercises. The visual Moodle exercises are a good support for the face-to-face course.

During the trial lessons in Austria and Italy, it became (once again) obvious how different the national written language knowledge of the deaf students is. The special design of the "Deaf Learning" course proved to be a suitable tool to deal with this fact. Based on the experiences of the trial lesson, the

final course design provides the teachers with a considerable amount of flexibility to react to the different needs of the students. Through this, the latter feel more comfortable and their motivation is raised.

The "Deaf Learning" language course represents one step towards an equal access to education for this target group. It also aims at showing to young deaf adults that learning the written national language can be fun, that it is worth the effort and that they will benefit from it in their future lives.

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